

# Bull Session

Some news you should know about your Ex

in this issue

TAKE THE 20% CHALLENGE  
THE NUMBERS ARE THERE

what's new?

THE ARCHIPELAGO EXCHANGE IS NOW TRADING OVER 8000 NYSE, AMEX, NASDAQ AND PCX LISTED SYMBOLS. FOR A COMPLETE LIST OF STOCKS TRADING ON ARCAEX VISIT WWW.ARCHIPELAGO.COM.

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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

## Take the 20% Challenge

Even before the “frontrunning” or “negative obligation violation” stories about the NYSE began to appear in publications throughout the country there was already a revolution underway. You may or may not have been aware of it, but electronic markets have been slowly gaining listed market share. Recent analyst reports show that NYSE market share has again dipped below 80% in recent weeks.

Further evidence of the move toward electronic listed destinations is the recent increase in volumes on the Archipelago Exchange (ArcaEx). Six of the top ten listed volume days on ArcaEx occurred in the month of May. All of our top ten listed volume days were reached in the last three months. These statistics demonstrate the growing desire for a fully transparent and unbiased marketplace for listed stocks. One that offers a fresh and “unconflicted” alternative to the status quo.

Still the NYSE’s 80% market share is substantial and we are not suggesting that it be ignored. However the benefits gained by trading on an electronic alternative, like ArcaEx, should not be ignored either. So take the 20% challenge and allocate a portion of your listed flow to ArcaEx. For example, if you are working a large order, there is a good chance that you are holding back a portion of it from the floor. Take 20% (or whatever number you feel comfortable with) of that order and send it to ArcaEx.

Your ability to modify or cancel that order in a sub-second leaves you with the ability to participate in a print at an away market or to cross the order internally. Use ArcaEx to be represented in the National Market System (NMS) on an all-electronic platform with simple rules that allow you to compete on an equal basis with all other participants.

### **The ArcaEx Alternative: No informational advantages**

ArcaEx’s business model in many ways is the polar opposite of floor-based models. The floor model, which anoints a “single” specialist (winner) who exclusively controls the trading of a stock to maintain “a fair and orderly market,” is especially rife with conflicts in the trading of liquid stocks where buyers and sellers can naturally find each other without the intermediation of an entrenched gatekeeper.

Conflicts of interest do not exist on ArcaEx because there are no anointed winners with informational advantages since everyone is competing on equal ground. Our rule set, automated matching and consistent order processing eliminates conflicts of interest. A real time, open, electronic limit order book with a matching engine governed by

Date	Volume
5/20/03	78,532,094
5/29/03	69,489,683
5/21/03	64,573,916
3/17/03	63,848,597
5/22/03	59,422,761
3/21/03	57,247,944
5/27/03	56,948,376
3/20/03	56,476,121
3/18/03	53,400,638
5/7/03	52,101,878

strict price-time priority rules provides everyone with an equal opportunity to compete. ArcaEx is designed to *prevent* rather than facilitate “frontrunning” or “negative obligation violations”, or whatever you want to call it.

## ***The ArcaEx Alternative: Operating within the NMS Guardrails***

Unlike some of our electronic competitors, ArcaEx is a full participant in the National Market System with our quotes being displayed alongside other exchanges and is fully accessible through the Intermarket Trading System (ITS). Though the NYSE constructs barriers to inter-market competition, through vehicles like its imperial treatment of competitors in ITS, ArcaEx is working to create immediate solutions and continues to pursue structural changes.

One way that we attempt to break down the barriers to competition is our aggressive pursuit of trade-through violations. If you have heard about our “Whiner” software you know that when an ArcaEx order has been traded through by the NYSE or any other ITS linked market we use an automated complaint program that notifies the offending party that a trade-through has occurred. Now you may be saying, “Great, you complain...but does that get my order filled?” The good news is that our complaining is beginning to get results. We have seen an increase in incoming ITS orders in response to our complaints. A recent sampling shows that if you leave your order in the ArcaEx Book up to 15 seconds after the trade-through occurs, your chances of getting stock can run as high as 85%. Faster than the average DOT turnaround time the NYSE advertises on their website as being 22 seconds.

Conversely, with the NYSE’s dominant market share, there is a good chance that the order executed on the NYSE at an inferior price was yours and the Specialist did not even try to reach out to the better price on ArcaEx. Hopefully you are whining about that to them directly. Though we have seen improvements, the real solution lies in modernizing the listed market to differentiate between manual markets and electronic ones. We will continue to work on that one.

## ***The ArcaEx Alternative: Liquidity and control***

We have often argued that a single Specialist in the trading of liquid names like IBM, AOL or GE adds little value. Your limit orders are free options in a Specialist’s hands. Indeed being your own “specialist” in these active names leaves the control of the order in your hands. It has been proven in the OTC market that there can be competing catalysts and that stocks can trade very efficiently without a single buyer or seller of last resort (See “AMR: A Case Study” on page 3). Don’t trust the dated caricature of the electronic order by believing that electronic markets only display 100 share quotes. A review of recent data showed that almost 50% of ArcaEx shares of listed orders have a value of \$50,000 or greater.

Just as liquidity begets liquidity, fear of illiquidity becomes a self fulfilling prophecy. Those who have already taken the challenge and send 10%, 20% or 100% of their listed orders to ArcaEx do so because of advantages like speed, anonymity and control. Using ArcaEx order types, you can emulate many of the strategies on the floor and regain control of your order. These benefits, coupled with ArcaEx’s connectivity to other market centers, often outweigh the value of being “on the floor”. By posting your limit orders on ArcaEx, your order doesn’t get lost in the crowd and is immediately available for execution. With ArcaEx’s routing arsenal which includes ITS, DOT,

### ***What’s Whiner?***

An automated trading tool developed by ArcaEx that sends an ITS message to an ITS linked market when a trade-through of an ArcaEx/PSE quote has occurred.

### ***ArcaEx in NMS:***

Linked to multiple sources of liquidity, ArcaEx looks for the best price in both traditional and alternate venues:

- ITS
- DOT
- PERS
- ECNs

PERS and direct links to ECNs, your marketable orders can interact with the best price in the market. Or you can always choose not to cede control of your order to the floor by keeping your order on ArcaEx with a Post-No-Preference order. If you want to access liquidity on electronic venues only, use a NOW order. Take back control and compete.

### **The ArcaEx Alternative: There is no monopoly on price discovery**

The misconception that primary markets are the sole purveyors of price discovery is being dispelled everyday. Price is being discovered on ArcaEx in listed names through-out the trading day. Innovative tools like our single-priced opening and market order auctions provide price discovery in the pre-market. During the week of May 5<sup>th</sup>, ArcaEx was at the inside in Lucent and Nortel over 80% of the time. During that same time period ArcaEx was alone at the inside in active names like IBM (14% of the time), Capital One (17%) and Kohls (21%). (See “*ETF Price Formation*” on page 3). In the search for the best price the ability to see available liquidity real-time and to interact with the best prices on alternative systems provides traders with an OTC-like toolkit for the trading of listed stocks. Simply put, there is significant risk today to trading listed names without one eye on ArcaEx.

### **ArcaEx at the Inside (Week of 5/5/2003)**

Symbol	% of Time
LU	83%
NT	83%
VRA	65%
EMC	60%
MOT	51%

## **The Numbers are There**

The numbers tell the story. In the true spirit of our open exchange, we publish a number of nightly, weekly and monthly reports to highlight activity that is occurring on ArcaEx. For those of you who haven't seen our recent ad campaign or haven't had a chance to review some of our recent reports, here's a summary along with information on how you too can receive an electronic copy of the reports. Take a look...the numbers are there.

### **Single Stock Listed Names**

If asked the question “Has ArcaEx made inroads into the trading of listed names?” the answer would be a resounding “Yes!”. ArcaEx is gaining market share in ultra liquid names and in stocks that are experiencing a significant increase in trading activity and volatility.

### **ArcaEx Listed Reports**

If you would like to receive daily or weekly activity reports simply subscribe to these reports by emailing your request to:

join-listed-weekly@  
list.tradearca.com  
or  
join-listed-nightly @  
list.tradearca.com

### **Five Most Actively Traded Listed Stocks on ArcaEx April 2003**

Symbol	Shares Handled <sup>1</sup>	Market Share <sup>2</sup>
LU	41,334,028	5.62 %
AMR	33,306,031	7.15 %
VRA	26,050,383	12.34 %
WEL	15,947,121	7.03 %
GE	15,343,061	2.22 %

<sup>1</sup> Single-side count for internally matched orders and those routed to an external destination.

<sup>2</sup> Shares handled as a percent of market wide listed volume.

### **AMR: A Case Study**

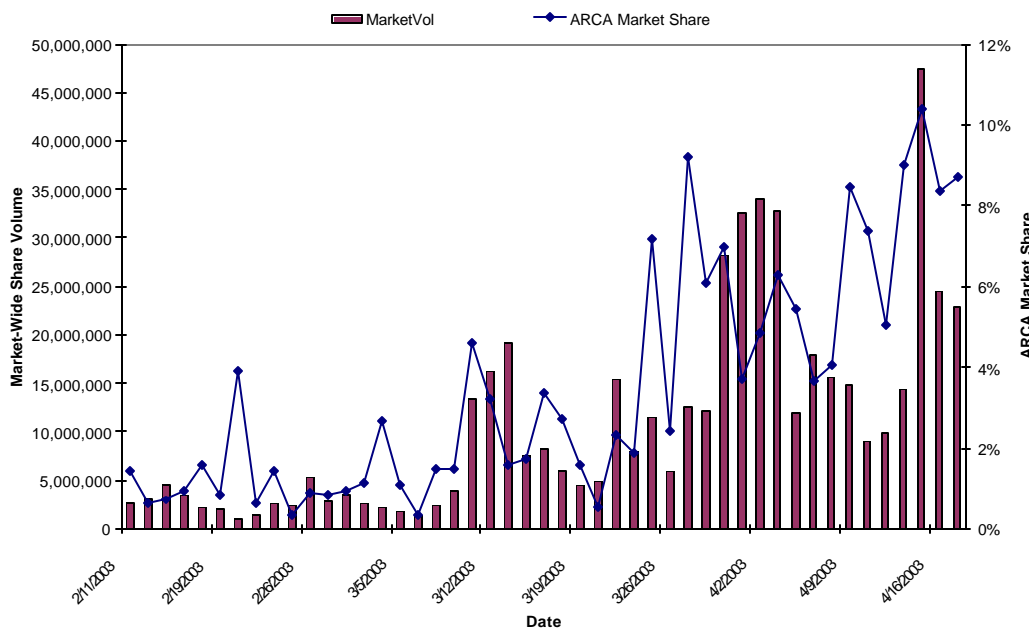
As American Airlines (AMR) teetered on the edge of a Chapter 11 filing, market wide share volume in AMR surged 8 to 10 times those of normal levels. As the overall market volume increased in AMR, ArcaEx's percentage of shares handled increased as well, with ArcaEx handling over 10% of the market share at the peak of the volume

Information is also available in the Data Center on our website:

[www.archipelago.com](http://www.archipelago.com)

surge. The ability to control your order and speed of execution in a fast moving market is only available in an electronic market. There is no “freezing the book” or “not enough manpower” on ArcaEx. The takeaway? Keep ArcaEx in mind in fast markets.

**Relationship Between Market-Wide Activity and ARCA Market Share**  
AMR



### It's Not Just AMR!

- ArcaEx market share in Lucent (LU) was above 18% as volume in LU surged in late February.
- As share volume in Boot & Coots (WEL) exploded in mid-March to six times normal volume ArcaEx market share exceeded 14%

## Exchange Traded Funds

ETFs are true electronic naturals, stocks that trade efficiently without a middleman. Over 50% of the trading of ETFs has shifted from the floor to electronic venues like ArcaEx. What differentiates ArcaEx from other electronic venues for the trading of ETFs? It's not only the fact that we can display our quote in the National Market System and connect to all major pools of liquidity, it's also in the numbers.

### ETF Price Formation

So why are more ETF orders being matched internally than ever before? Because ArcaEx is at the inside more and more. And in many cases ArcaEx is frequently alone at the inside:

**Five Most Actively Traded ETFs on ArcaEx**  
(Week of May 5, 2003)

Symbol	% of the Time ArcaEx is at the NBBO	% of the Time ArcaEx is alone at the Inside
QQQ	60.5 %	15.2 %
SPY	58.4 %	22.4 %
DIA	57.5 %	19.4 %
SMH	55.6 %	29.1 %
IWM	79.6 %	72.1 %

These numbers clearly refute the myth that only primary markets discover price. ArcaEx, conveniently located at the corner of price and speed.

### ArcaEx ETF Reports

If you would like to receive daily or weekly activity reports simply subscribe to these reports by emailing your request to:

join-ETF-weekly@  
list.tradearca.com  
or  
join-ETF-nightly@  
list.tradearca.com

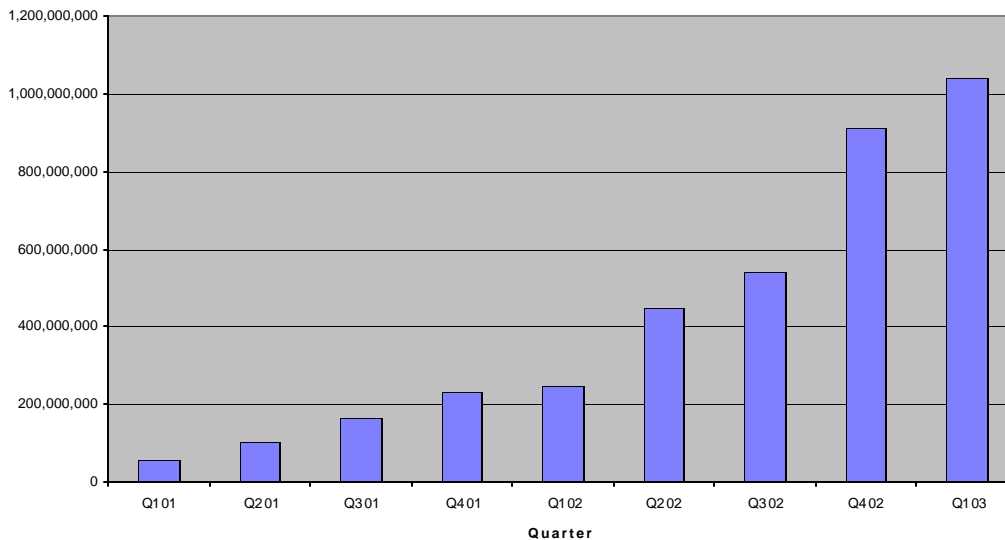
Information is also available in the Data Center on our website:

[www.archipelago.com](http://www.archipelago.com)

## ETF Volume

ArcaEx's continued growth in ETF volume can be attributed to key factors like our merger with the RediBook ECN, the three-cent trade through exemption in the big three (QQQ, SPY and DIA), the ability to see our quote in these names (no "trading in the dark"), along with increased client usage.

**ARCA ETF Volume**



With the volume quadrupling from the first quarter of 2002 to the first quarter of 2003, ArcaEx matches 86% of ETF orders on our system and routes outside our Book only 14% of the time. And a higher match rates translates into faster executions in ETFs.

## OTC Stocks

On April 11, 2003, the migration of OTC stocks from the Archipelago ECN to ArcaEx was completed. The number of stocks now traded on ArcaEx exceeds 8,000. We continue to handle approximately 1 in 3 shares in many active OTC names.

### 10 Most Active Stocks Where ArcaEx Handles Over 30% April 2003

Symbol	Shares Handled <sup>1</sup>	Market Share <sup>2</sup>
KLAC	83,283,350	35.16 %
AMGN	67,168,626	31.99 %
NVLS	64,992,767	35.61 %
USAI	59,724,914	38.24 %
AMZN	59,632,069	30.06 %
MXIM	52,707,507	31.68 %
CMCSA	50,980,180	31.58 %
EBAY	48,348,178	34.12 %
LLTC	48,282,767	32.21 %
QLGC	45,880,130	31.22 %

<sup>1</sup> Single-side count for internally matched orders and those routed to an external destination.

<sup>2</sup> Shares handled as a percent of market wide OTC volume.

## Tape B Credit Q1 03:

ArcaEx liquidity providers earned a credit of \$1.40 per trade.

## ArcaEx Fees/Rebates

### Liquidity Providers:

2/10¢ Credit plus 50% Tape B rebate on AMEX listed stocks and 40% Tape A rebate on NYSE listed stocks.

\*Proposed Tape C (OTC) rebates are pending SEC approval.

### Liquidity Takers:

3/10¢ Fills against the Book

4/10¢ Fills routed away

The overall OTC share volume on ArcaEx continues to grow and has exceeded previous records on the Archipelago ECN. Our internal execution percentages also reached new highs in May 2003 when approximately 80% of orders received were matched on our system.

Though more and more orders are executed on the ArcaEx trading platform, the ability to reach out for the best price remains an important attribute. We link you to multiple islands of liquidity. Hence the name...Archipelago. We can access prices on SuperMontage, regional exchanges, and ADF quickly and easily. That said, the various order types available on ArcaEx let you determine if you want your order to be sent outside of the system. Because every trading strategy has its own unique flavor you need to have unique order types available in your trading arsenal. For complete information on available order types please visit the Archipelago website at [www.archipelago.com/exchange/order\\_types.asp](http://www.archipelago.com/exchange/order_types.asp).

### ArcaEx vs. SuperMontage Cost Comparison

Another important number in the execution equation is the cost of trading. A simple comparison of trading OTC stocks on ArcaEx versus SuperMontage shows a substantial savings on ArcaEx. If you post and take liquidity on an equal basis you save almost 30% trading on ArcaEx compared to SuperMontage.

**Assumption:** 2 trades; 400 shares each; Order #1 posts liquidity; Order #2 takes liquidity

### ArcaEx OTC Order Types:

- o Market
- o Limit
- o Inside Limit
- o Reserve
- o Sweep Reserve
- o Random Reserve
- o Discretionary
- o Passive Discretionary
- o Discretionary Limit
- o Pegged
- o IOC
- o PNP
- o NOW

	ARCA	SuperMontage
<b>#1 Posts Liquidity</b>		
Transaction Credit	-.80	-.80
ACT / Tape Fee	.00	.03 <sup>1</sup>
<i>Posted Subtotal</i>	<i>-.80</i>	<i>-.77</i>
<b>#2 Takes Liquidity</b>		
Transaction Fee:	1.20	1.30 <sup>2</sup>
ACT / Tape Fee	.00	.03 <sup>1</sup>
<i>Taker Subtotal</i>	<i>1.20</i>	<i>1.33</i>
<b>Total Cost</b>	<b>.40</b>	<b>.56</b>

<sup>1</sup> ACT fees are charged unless you execute over 10,000 SuperMontage trades per day on average over the course of the trading month; report at least 98% of internalized transactions in NASDAQ securities to ACT; post in SuperMontage (including through a member that is a SuperMontage participant) at least 70% of bids offers and non-marketable limit orders

<sup>2</sup> Assumes a blended rate of .00324 which includes the additional cost of routing to ECNs in SuperMontage approximately 15% of the time.

Now 16 cents a trade may not seem like a lot but assume that you are doing 5 million shares a day with an average trade size of 400 shares, providing and taking liquidity equally. The cost on ArcaEx would be \$2,500 and the cost on SuperMontage would be \$3,462, saving you almost \$1000 a day. If you would like to receive a cost analysis comparing your SuperMontage trading costs to ArcaEx please contact your Sales Representative.

**Archipelago...the numbers are there!**