April 8, 2004

Mr. Jonathan G. Katz
Secretary
Securities and Exchange Commission
450 Fifth Street NW
Washington, DC 20549-0609

Via Electronic Mail

Re: File No. S7-07-04; Options Market Structure

Dear Mr. Katz:

The International Securities Exchange, Inc. ("ISE") is pleased to respond to the Commission's Concept Release regarding the market structure for listed options. We believe that the U.S. options market is one of the most competitive securities markets in the world. Our market operates efficiently and provides investors with competitive prices in a timely manner. As the Concept Release discusses, a number of factors underlie the current strong state of this market: the increase in competition since the onset of multiple trading; the entry of the ISE into the market; and the Commission's market structure initiatives, including the mandate that there be firm quotes and the requirement that the options exchanges develop an automated linkage ("Linkage") to join their markets.

Given the continuing growth and success of the listed options market, we believe that there is limited need for Commission intervention in the market at this time. Rather, we believe that the Commission, in overseeing the continued evolution of the options market, should focus its resources to ensure that the exchanges channel their competitive initiatives in ways that benefit investors. A summary of our comments on options market structure is as follows:

- Index Options: The Concept Release details the remarkable progress in the equity options market in the last five years, where investors receive inexpensive and efficient execution of their orders. However, few of these benefits accrue to investors in index options, where exclusive license arrangements provide a single exchange with monopoly pricing and market control. We have pending at the Commission a petition (the "Petition") to remedy this situation. The response of the monopoly exchanges to the Petition has been to raise concerns regarding the property rights of index providers. However, our Petition would protect the property rights of index providers, while bringing to investors in index options the same benefits that investors in equity options have achieved in the last five years. The most important step the Commission can take to improve the options market is to adopt the rule we propose in our Petition.

- Payment for Order Flow ("PFOF"): We long have favored the abolition of PFOF in the options market. As we stated in a letter to then-Chairman Pitt on February 7, 2003: "we believe that the only way to address the problems of PFOF is for the Commission itself to take action to ban all forms of payments, whether the payment comes directly from specialists and market makers, or whether exchanges handle the administration of such payments." We continue to believe that PFOF distorts the markets, raises best-execution concerns and creates hidden order-routing incentives for broker-dealers. We also believe that there is no fundamental difference between exchange-administered PFOF programs and specialist-administered programs. The Commission should address the root problem by banning all soft and hard dollar payment programs. Banning only exchange-administered programs does not resolve the problem and will reward those markets with limited internal competition that allows a single specialist to trade against sufficient order flow to make its self-administered payment program viable.

- Internalization: We believe that internalization benefits investors only when broker-dealers provide liquidity for larger orders. Thus, our long-standing view is that the Commission should restrict exchange internalization programs to orders of 50 contracts or more. We explained our reasoning for this position in our February 12, 2003 and September 12, 2003 letters opposing the Boston Stock Exchange's ("BSE") proposal to permit internalization of small orders as part of its "Price Improvement Period" ("PIP"). The Commission nevertheless approved a pilot program allowing the internalization of small orders. Unless the BSE can demonstrate that there are clear benefits to internalizing small orders in its PIP, we urge the Commission to ban the BSE – and every other exchange – from offering systems that permit members to internalize small orders.

- Specialist Guarantees: Determining the appropriate level of specialist guarantees requires weighing the rewards that specialists receive for their obligations to the marketplace against the concerns that arise if specialists lock up too much order flow based on their status in the market. Overall, we believe that the Commission has struck the right balance in this area. We believe that specialists deserve slight preferences, based on the benefits they provide to the market, in any exchange algorithms that allocate incoming order flow. The degree to which an exchange preferences specialists should depend on the specific obligations specialists have on that particular exchange and should not be structured as ways for firms to attract or internalize order flow.

- Structural Market Conflicts: The options exchanges compete vigorously to maximize their order flow. At the same time, these exchanges have a statutory duty to police the order-routing decisions of its members. This gives rise to at least an appearance of a conflict, and places the exchanges in a difficult position. We believe that the options exchanges – and any other self-regulatory organization ("SRO") affiliated with an options exchange – should focus their best execution reviews on whether their members have reasonable order-routing procedures in place, and that they follow those procedures. As to evaluating actual order-routing decisions of members, we believe that is best handled either by SROs that are not affiliated with an options exchange or by the Commission itself.

- Rule 11Ac1-5 under the Securities Exchange Act of 1934 ("Exchange Act"): This rule requires markets to provide certain market quality statistics. As the Concept Release notes, the Commission has not applied the rule to the options market because, until recently, there has not been a uniform national best bid and offer ("NBBO") to calculate a number of the required statistics. We believe that eventually there may be merit to applying this rule to options. However, it is not yet clear whether the Options Price Reporting Authority's NBBO is sufficient to underlie the Rule 11Ac1-5's requirements. Moreover, there is not yet market acceptance of this calculation. Thus, we suggest that the Commission continue to monitor the development of the options NBBO and propose expanding Rule 11Ac1-5 to cover options only when there is possible refinement and more wide-spread acceptance of the options NBBO.

- Penny Increments: We oppose extending penny pricing to the options market. The Concept Release notes the possibility that penny pricing has brought some benefits to the underlying equity market, primarily the tightening of overall quotations. On the other hand, penny pricing may also have reduced overall liquidity in the equity market, and certainly has defused liquidity over more pricing points. Given the uncertain effects of penny pricing in equities, we believe that it is premature even to consider penny pricing for options. As the Commission also is well aware, there is a continuing industry concern with the proliferation of quotation message traffic in options, and penny pricing certainly will exacerbate that concern. Moreover, liquidity in options already is dispersed among the many series that overlie a single equity security. Dispersing that liquidity further through penny pricing may have a significantly adverse effect on overall pricing and liquidity for options.

Rather than discuss each of these issues in more detail in this letter, we have attached to our comment letter a Memorandum that our network sniffers recently intercepted in interplanetary communications. Lost in the excitement of Earth-bound news such as Super Bowl halftime shows and Sarbanes-Oxley reform initiatives was the news that our Mars-based rovers have discovered primitive forms of life on that planet. We refer to these life forms as "primitive" not in the traditional sense, but only because they have yet to establish a listed options business. In fact, in other ways they are much more advanced, since they have been able to send "manned" (using that term loosely) expeditions to Earth to study our form of options regulation. In the attached Memorandum, the most recent Mars-based expedition team reports their findings on the U.S. options market structure to headquarters.

If you have any questions on our letter, please feel free to contact us. If you have any questions on the attached Memorandum, please let us know and we will unleash our network sniffers to find the answers for you.

Sincerely,

Michael J. Simon
Secretary

Attachment

cc: Chairman Donaldson
Commissioner Atkins
Commissioner Campos
Commissioner Glassman
Commissioner Goldschmid

Annette Nazareth
Robert Colby
Elizabeth King
Deborah Lassman Flynn

Attachment

Intergalactic Memorandum

To: Mars Central Command
From: Mork
Re: Earth-Based Regulation of Securities Options

I am pleased to report that our mission to Earth was a complete success. Our primary objective was to study the regulation of the listed options market in the United States and to advise Central Command as to whether we could use that regulatory model for our developing options market.[1] After months of detailed analysis, we can report that the U.S. options market is healthy and vibrant, and could well be a model for our market. This is in marked contrast to the last expedition we sent to review the U.S. options market in 1998. Below we outline the general structure of the U.S. listed options market. Then, discussing issues under review by the U.S. regulatory agency, the Securities and Exchange Commission pursuant to a "Concept Release," we recommend how best to construct a regulatory model for our options market.

The U.S. Listed Options Market

Listed options trade on one of six fully-registered U.S. securities exchanges. All listed options are issued by, and cleared through, The Options Clearing Corporation ("OCC"), which operates much like an industry utility. Due to this common clearing, all OCC-issued options are fungible, regardless of the exchange on which an investor purchases or sells the options. In addition, OCC clears only transactions effected on a registered exchange. As a result, all listed options transactions occur in the most highly-regulated trading environment in the United States, with all markets subject to similar rules. At the same time, the barriers to entry into this market are reasonable and surmountable by those entities willing to make the commitment to meet exchange registration requirements. Since the time of our previous expedition there have been two new entrants in this market, the newly-registered International Securities Exchange and a facility of the Boston Stock Exchange called "BOX."

Much has changed in the nearly six years from the last Mars expedition. At that time, each of the then-four options exchanges pretty much traded options on an exclusive basis, with very few actively-traded options traded on more than one exchange. The exchanges imposed relatively high fees for customer transactions and low fees for their market makers. All the exchanges were floor-based, with limited automated execution systems. The exchanges did not disseminate firm quotations, nor did they disseminate the size of their quotations. The auto-quote systems then in effect did not permit the entry of competitive quotations by competing market makers. There also were limited "national market system" trappings for options. Without multiple trading there was no need to calculate a national best bid and offer ("NBBO") for an option, nor was there a reason to build a link between these markets.

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[1] Our tour on Earth lasted (in Earth time) from October 1, 2003 until March 31, 2004. As commander of the expedition, I assumed the identity of a Chicago-based consultant and baseball fan. (Chicago was the former center of U.S options activity; it was not until after we set up camp in Chicago that we realized the center had moved to New York City.) Under this assumed identity I successfully completed the secondary objective of our annual voyages to Earth: to ensure that the Chicago Cubs and their fans suffer yet another year without winning the baseball World Series. You may have read about my "participation" in a playoff game in *The Martian Chronicle*. Assuming this identity also provided me with the ability to disappear from public view without raising any suspicions. In fact, many of the helpful people in Chicago offered to assist me in leaving the planet.

Within a few years the Earthly landscape has changed greatly. In November of 1998 the ISE announced plans to register as an exchange and to trade options that then represented approximately 90 percent of the then-current industry volume. The ISE proposed a fully-electronic agency-auction market place in which customers always had priority over broker-dealers. At the same time, the ISE believed it could enhance liquidity by having market makers compete for order flow based on both the price and size of their quotations. It also offered broker-dealers who had limited ability to be market makers on the floor-based exchanges the opportunity to bring their liquidity to the market. Furthermore, the ISE proposed a market model that highlighted firm quotations, complete with size.

The mere announcement of the ISE's market intentions started a cascading series of market changes. By the middle of 1999, even before the ISE began operations, sole listings in equity options disappeared as the four exchanges began listing all actively-traded options. These exchanges also settled antitrust actions against them regarding their prior competitive practices. This not only led to the formal shedding of prior rules and practices the Commission found to be anticompetitive, but it also resulted in a clear understanding by all market participants that the Commission was not going to tolerate any activity that even smelled (an Earth-based sense that is hard to describe) like it would limit competition.

Changes accelerated when the ISE began operations on May 26, 2000. As it had proposed, the ISE provided its members with firm quotes, and its members could see the size of those quotations in the direct market data feed from the ISE. The ISE also provided instantaneous executions at those quotes. The ISE's trading system, which combines customer priority with competing market makers, also has worked well, significantly improving market quality. The Commission itself attested to this in footnote 35 of its Concept Release, highlighting the quality of the ISE's quotations.

Following the entry of the ISE into the market, the pace of market change increased. The options exchanges themselves, through their market data utility (the Options Price Reporting Authority or "OPRA"), began to disseminate the size of their quotations to the investing public at large. In December of 2000, in Release 34-43591, the Commission extended the Firm Quote Rule, Rule 11Ac1-1 under the Exchange Act, to apply to the options market. As applied to options, that rule requires exchanges to be firm for the full size of disseminated quotations for customers, but allows them to be firm for a smaller size for professional, or broker-dealer, orders. At the time, the Commission expressed concern that market makers may be hesitant to trade with informed professionals, and thus would widen their quotes if the Firm Quote Rule did not distinguish between customer and broker-dealer orders.

All exchanges initially took advantage of this two-tiered application of the Firm Quote Rule, providing less size for professional orders. However, in 2003 (Filing SR-ISE-2002-24) the ISE moved to "one size," providing broker-dealers with access to the full disseminated size of disseminated quotations for their orders. As just noted, the ISE still has the best-quality markets, indicating that its market makers are just as comfortable trading with professionals as they are with public customers. Thus, any initial fears that requiring market makers to be firm for non-customer orders would harm market quality appears unfounded. Indeed, the ISE now has even gone further, with recently-approved filing SR-ISE-2003-34 providing that ISE quotes are firm for their full size not only for professional orders, but even when one ISE market maker's quotes interact with the quotes of another ISE market maker.

In light of this competitive pressure, the floor-based exchanges have begun to offer additional automated trading systems. Moreover, the entire financial structure of the industry has changed, with exchanges eliminating transaction fees for the execution of customer orders.

Thus, subject to the discussion below on index options, fees for market makers and broker-dealer proprietary trading now support the exchanges. Finally, the Commission ordered the exchanges to build a linkage between their markets to help address pricing disparities and to provide greater assurances that customers can receive the best execution of their orders. The exchanges worked together to implement this Linkage in 2003.

As you can image, the U.S. listed options market in 2004 bears little resemblance to the market described in the report of our 1998 expedition. Quotation spreads are tighter, and there is much greater liquidity and efficiency in the market. While the ISE did not even exist in 1998, it now has the largest share of equity options volume. On an overall basis, listed options volume has increased by more than three-fold. This is not surprising given the enormous strides forward in this market.

At the same time, such rapid changes almost always result in some market dislocations, as well as the advent of questionable market practices. The U.S. listed options market is no exception. Exchanges that used to have trading monopolies in an options class now must compete with up to five other exchanges. One of the results is that market maker profitability on these exchanges is under pressure, leading to the merger of some firms and the exit of some firms from either one or more exchanges, or even from the business in general. There also is increasing economic pressure on the exchanges themselves. Most of the options exchanges either have "demutualized" or are in the process of doing so. An exchange demutualizes by separating trading rights from ownership, giving the exchange greater flexibility to raise capital, to buy other businesses, or even to sell itself to others.

While competition provides many benefits, it also provides a fertile ground for the growth of new types of problems. For example, in the era of singly-listed options, broker-dealers could send order flow to only one exchange and did not have to worry that there may be a better price for their customer orders on another exchange. Earthlings refer to this as "best execution," which obviously has another meaning in our Martian penal code. Without multiple listings, exchanges did not have to police best execution. Regulators also must monitor the form that competition takes, to make sure that it benefits the ultimate investor, and not the intermediaries who handle customer orders. Unfortunately, the U.S. market now faces practices called payment for order flow and internalization that raise investor-protection issues. Below we discuss some of the more important issues the U.S. market faces, while providing specific advise on how to address these same issues on Mars.

<u>Index Options</u>

Our upbeat discussion of progress in the U.S. options market is limited to the market for options on individual stocks. Remarkably, the market for options on stock indices is pretty much the same as it was in 1998: generally speaking, only one exchange lists an index option, and the listing exchange is not bashful in exerting monopoly control over the market. Monopoly exchanges continue to charge high customer fees for the trading of these options, and the lack of intermarket competition leads to large spreads. Exclusive trading of index options has the same roots as the exclusive trading of equity options; while the Commission eliminated exclusive arrangements for equities, it failed to do so in indices.

This lack of competition is not due to lack of interest in multiple trading. Rather, exchanges traditionally have entered into contracts with an index creator or sponsor to license the right to trade options on the index, generally on an exclusive basis. Exchanges entering into exclusive contracts claim that these arrangements protect "property rights" – that they appropriately protect the rights of index licensors to develop indices and to work with an exchange to make them successful in the market place. While a competing exchange may be tempted to challenge the legal standing of such contracts, OCC will not clear options for an exchange that lacks a license agreement, negating even the possibility of such a legal challenge. The ISE submitted a rulemaking petition to the Commission in November of 2002 asking that the Commission adopt a rule phasing out exclusive licenses. However, to date the Commission has not acted on that petition.

The biggest lesson we have learned on this expedition is not to repeat the same mistake for index options on Mars. While we have the same concept of property rights, it is clear to us that multiple trading of index options certainly can co-exist with the protection of index creator property rights. Remarkably, there is no sunset on the right of an exchange to maintain an exclusive license for index options. Similar to our law, all civilized countries on Earth place limits on property rights like copyrights and patents. After a certain amount of time, such inventions become part of the public domain. In contrast, an exchange conceivably could tie up rights to index options forever.

But this is a moot point in the index option debate because the ISE Petition clearly recognizes an innovator's property rights. That petition states that the ISE would be willing to pay the same license fees for multiply-traded index options that any other exchange pays. Such payments protect index creators and allow them to profit when their products are successful. In this regard, investors *and* index creators were winners when multiple trading began in options on the Nasdaq 100 Tracking Stock Fund or the "QQQ's." These options are remarkably similar to index options in that the economic underpinning of the option consists of a basket of stocks. In fact, the CBOE actually treats these as index options in their promotional materials and statistical data.

In an index option, there is cash delivery of the index value; in the QQQ options, the deliverable is a share of an investment company that holds the basket of stocks that comprise the index. When Nasdaq granted multiple licenses for trading options on the QQQ's, it charged each exchange a uniform license fee. Trading volume in these options mushroomed and spreads narrowed. Customers benefited from the better market and the property owner – Nasdaq – benefited from the increase in license fees. The ISE's very limited experience with multiply trading a single index option also shows multiple trading has resulted in a decrease in the quotation spread and an increase in the option's trading volume.

Perhaps our Martian analytical skills are not sufficiently advanced to understand why the Commission has not yet acted on the ISE's Petition. Indeed, we find it remarkable that the lengthy Concept Release details virtually every competitive aspect of the listed options business but does not contain a single mention of the index option issue. This is not a trivial issue since index option volume represents 20 to 30 percent of one large exchange's total volume. Our recommendations to Central Command on how to handle this issue on Mars are:

- Competition between markets is the key ingredient to a successful market structure. Regulation is a poor substitute for competition and never should be the first choice in addressing market concerns; regulation should be used to channel competition into appropriate areas.
- It is not sufficient to foster competition in only one sector of the market. Unless there is some clear contra-indication to the benefits of competition (a difficult standard to meet), we should encourage competition in all our options products. We should not permit an exchange to limit competition by entering into an exclusive license arrangement.

- Our regulations should prohibit any exclusive licensing schemes or any preferential treatment of one exchange over another in licensing arrangements. At the same time, we should allow product licensors to negotiate for license fees consistent with free market forces, as long as such arrangements are uniform for all licensees. This will protect the intellectual property rights of those who create indices, will keep the market open to competition, will reduce the need to impose additional regulatory burdens on monopolists as a substitute for competition, and, most importantly, will provide the most benefits to all those Martian individual investors, like Aunt Mindy from Alba Patera.

<u>Payment for Order Flow</u>

This one you will not believe. The 1998 expedition reported that the options exchanges charged members higher fees for customer orders than for market maker or proprietary orders. As noted, multiple trading and the entry of the ISE into the market have turned the industry's economics upside-down: market makers and professional traders support the exchange, with no exchange charging for customer trades (except of course for the index option monopolists). In fact, this even understates the degree of change in pricing policies. Not only do the exchanges allow firms to trade customer orders for free, but their market makers actually pay firms to send them these orders! This effectively reduces the cost of customer transactions to less than zero.

Before you fire off a reply asking lots of questions, let me give you a bit more background and history. This all started when some market makers began paying order entry firms for their customer orders, independently from any exchange on which they traded. Presumably these market makers were sufficiently profitable that they could return some of their trading profits to these firms. However, it makes sense for a market maker to pay an order entry firm out of its own pocket to send order flow to an exchange only when there is little competition on the exchange for that order flow, thus allowing the market maker to trade against enough of that order flow to justify the payments.

The development of "payment-for-order-flow" or "PFOF" left exchanges with competitive auctions scratching their heads. If there is real competition on an exchange for order flow, a specialist cannot afford to pay for that order flow since there is no assurance that they would trade against the incoming orders in sufficient volume to offset the cost. To compete, exchanges began to administer their own, collective, PFOF systems. Under these systems, the exchanges imposed a fee on market makers for some or all customer transactions, creating a pool of money to pay for order flow. The exchanges delegate to their specialists (or specialist-equivalents like Primary Market Makers on the ISE) the responsibility to administer this fund and to make payments to order-flow providers. Thus, all market makers collectively pay for order flow, leveling the playing field with specialists from less competitive exchanges.

When I asked a U.S. lawyer how the Commission could permit PFOF, she looked at me strangely and asked what planet I was from. I honestly told her I was from Mars. As so often happens, she stared at me blankly, assumed I was joking, and just continued with her explanation. However, I must admit that her explanation still does not make much sense to me. First, the Commission allowed exchanges to implement these programs without prior public comment. The explanation was that these are simply "fee filings," which can become effective on filing. To use an Earthly expression, that sure seems like the tail wagging the dog: the fee is just the tail-end of a substantive payment program.

The only exchange that actually sought (and received) Commission approval for its PFOF program was the ISE, and the Commission did find that program consistent with the requirements of the Exchange Act. In Release No. 34-43833 (approving File No. SR-ISE-00-10), the Commission determined that the ISE program was a "reasonable competitive response on the part of the ISE to the adoption of similar payment-for-order-flow programs on other exchanges." Do you follow that? The Commission approved the ISE's proposal on the basis that it was a reasonable response to other programs that the Commission had not approved. At the risk of totally confusing you with another Earthly expression, this is called "bootstrap" reasoning (if you do not understand that, try pulling yourself up by your bootstraps even in the relatively light gravity of Mars).

Giving this some thought, I mentioned to her that this probably was not so bad after all, since the end-investor would reap the benefits of these programs. I was quite surprised when she explained that while this was likely, there is no way to confirm that. While the Commission does not require firms to pass these payments to their customers, firms that accept payment generally have lower commission levels.

I have tried hard to make sense of this. Market makers and exchanges have programs where they pay firms to send them order flow. The Commission has approved only one program on the basis that it was necessary to compete against other non-approved programs. And, while customers likely do benefit from PFOF, there is no way to prove or quantify such payments. Well, at least the U.S. securities markets operate on the basis of full "sunshine" or disclosure. Thus, customers will have all the information they need on whether firms sell their order flow when choosing who to use as an agent.

Not quite. There is some very high-level disclosure of this practice. Under Exchange Act Rule 11Ac1-6, a broker-dealer must issue a quarterly report explaining its order-routing policies, including "any arrangements for payment for order flow." Also, Exchange Act Rule 10b-10 requires broker-dealers to include on customer confirmations information indicating whether they receive PFOF. The broker-dealer either must provide the "source and nature" of this payment, or simply state that it will provide the "source and nature" upon request. But in no case does an investor routinely receive information indicating whether the broker-dealer sold his or her order, and if so, for how much. Here comes one more Earthly expression: boilerplate. PFOF disclosure is just another line of legalese buried in a mass of other disclosure that does not provide investors with sufficient information to make informed choices when choosing a broker.

The Commission seeks comment on this area, including whether it should ban the practice entirely, or only exchange-administered programs, as a petition from the Philadelphia Stock Exchange ("Phlx") recommends. It also requests comment on whether it should pursue a petition by one market maker that wants to be exempt from paying into exchange-administered programs. Not surprisingly, the exchange and the market maker seeking to cripple exchange-administered programs are the focal points of market maker-administered programs. Cloaking self-interest as investor protection has a long history on Earth. As the ISE stated in its February 3, 2003 letter to then-SEC Chairman Pitt on the subject:

> PFOF first became prevalent in a specialist-sponsored program on the Phlx. It is not surprising that that the Phlx now seeks to turn the clock back to early 2000, when its specialists had significant advantages in paying for order flow. In fact, the Phlx is proposing only an extremely limited "prohibition," curtailing only exchange-administered PFOF programs. The Phlx's proposal is certainly not the across-the-board PFOF prohibition the market needs. Rather, it is a transparent competitive attempt to allow the Phlx to maintain those forms of payment beneficial to its specialist-dominated market, while discriminating against exchanges that have competitive internal auctions.

> Therefore, we urge the Commission to ban PFOF across-the-board, whether paid directly by specialists or though programs administered by exchanges.

Having read all the material on this, we believe that the ISE's letter to Chairman Pitt describes the best approach to PFOF. I suggest that we adopt the ISE's recommendations, as updated to reflect recent events:

- We should explicitly ban all our broker-dealers from accepting PFOF in the options market. The ban should cover hard dollars, soft dollars, reciprocal arrangements, or any other forms of payment.
- We must treat market maker-administered programs the same as exchange-administered programs. There is no legal, economic or policy basis to distinguish between the two. Banning only exchange-administered programs actually will benefit those exchanges that have less competition in their market places. This will pressure other exchanges to move towards less competitive market models, which is exactly opposite what we want to achieve.
- There is no basis for our central regulator to exempt any market makers from exchange-administered programs. Let the market places themselves decide how to administer these programs. The central regulator should not permit one or more market makers to free-ride on the order flow that an exchange attracts through payments made by other market makers.
- I appreciate that our regulators ultimately may decide that there are just too many permutations of PFOF and that it is not realistic to prohibit this practice entirely. If that is the case, then we need to regulate the practice. First, we should require any firm that receives PFOF to state that it is passing the benefits to the customer. We also should consider more specific disclosure of payment practices. In my humble opinion, the more sunshine we require on this practice, the more likely this practice would disappear.

Internalization

This long word refers to the simple concept of a broker-dealer trading against its own order flow. On the surface, this appears to give rise to conflicts similar to PFOF: a firm that trades against some or all of its customer order flow can profit both from the commission it receives from the customer and a possible trading spread. As with PFOF, firms internalizing order flow can have mixed incentives. While the firm wants to provide the customer with best execution, it also seeks to maximize its profitability in handling that order. However, this is a concern only if it harms the customer, which clearly would occur if a broker-dealer decides to route orders based more on its interests than those of its customers. Investor harm also could occur if internalization adversely affects market structure. For example, an exchange could provide broker-dealers with an advantage in trading against its own customer orders, diverting order flow out of an exchange's auction, thus lessening incentives to quote competitively.

As noted in my description of the U.S. market, all listed option transactions occur on an exchange. Since there is no over-the-counter dealer market in standardized OCC-issued options, firms cannot simply trade against the orders they choose and then "print" them on the tape. Rather, firms must compete for order flow in an exchange-based auction and generally can trade against any order flow – including their own – only if they "win" an order pursuant to the exchange's trading rules or algorithm. This is a significant benefit to investors and lessens the concerns of internalization that are present in the underlying equity market.

There is an area of internalization that we do need to address, and that the Commission discusses in its Concept Release: "facilitations." A broker-dealer facilitates a customer order by providing some or all of the liquidity necessary to fill that order. While the broker-dealer generally is willing to trade against the entire order, the Commission requires that an exchange first expose the order to its crowd for possible price improvement and participation in the execution. If the facilitating broker-dealer does participate in the trade, the Commission requires that an exchange's rules limit the firm's guaranteed participation to 40 percent of the order. The facilitating firm offers liquidity "as a last resort" for the remainder of the order, but only participates further in the trade if there is not sufficient crowd interest to fill the order.

The theory behind this limitation is that auctions can prosper only if there is significant order flow over which market participants can compete. Allowing firms to capture too much order flow due their status in the market, rather than as a result of the quality of their quotations, will harm the auction. We fully agree with this position. If exchange rules permit significant internalization, we strongly believe it will have an adverse effect on the auction. Market makers quote aggressively to attract order flow. To the extent that a significant portion of order flow is removed from the auction, there is less incentive for market makers to compete for that order flow, leading to wider quotes. Thus, there are strong reasons to limit internalization.

You may be wondering why it is appropriate to permit a broker-dealer to capture *any* portion of a facilitation order simply because it is bringing the order to an exchange and wants to trade against it. The reasoning is that the broker-dealer must be providing some special benefit to the market place to justify the internalization. Starting with the Commission's approval of the ISE's Facilitation Mechanism, the traditional justification for a guaranteed facilitation participation has been that the broker-dealer is adding liquidity to the market for larger orders. Until recently, the Commission approved facilitation rules only for larger orders, those of 50 contracts or more. This generally has worked well, and we would recommend including large-order facilitations in our market.

The biggest problem the U.S. markets have faced in administering their facilitation rules concerns broker-dealers who "shop" orders from exchange to exchange. They may do so not to find the best price for a customer, but to find the exchange where they can trade against the largest portion of the order. In this scenario, a broker-dealer will attempt to execute an order on one exchange, but if it appears that the firm will lose more of the order than it likes, it simply takes the order to another exchange, notwithstanding the fact that prices might move adversely to its customer while it shops the order. Since our market will be entirely electronic like the ISE's, we can avoid this problem altogether. On the ISE, broker-dealers expose the order electronically and do not know during the exposure period how much of the order will interact with other members, and they have no reason to pull their orders due to potential break-up. Absent this inherent safeguard, the only protection against abuse is a strict surveillance program overseeing broker-dealer best execution obligations.

Unfortunately, the Commission recently has strayed from its policy of limiting facilitations to large orders. The centerpiece of the recently-approved BOX facility of the BSE is a "Price Improvement Period" or "PIP" that permits members to internalize orders of any size, as long as they guarantee the customer order being internalized a price at least a penny better than the NBBO. On top of this, BOX permits members to "direct" orders to specific market makers who then can enter the order into the PIP. The only reason we can see for a firm to direct an order to a designated market maker is either to internalize that order or to receive PFOF. Of course, BOX could not justify this practice as allowing firms to provide liquidity for larger orders. Rather, BOX justified this internalization/preferencing vehicle as a way to provide price improvement for investors. This is possible because, as discussed later, options generally trade in only $.05 and $.10 increments in the United States.

While this argument initially had some surface appeal for me, it did not take much investigation to find out what is really behind the BOX proposal. The BSE certainly is not seeking to promote price improvement; rather, it is providing members with greater opportunities to internalize order flow or receive PFOF. BOX does not require members to give customers the best price at which the member is willing to trade, which is what you would expect in a price-improvement mechanism. Rather, it allows members to disseminate the worst price they are willing to give (that is better than the NBBO) and then lets them match better prices during the auction, while retaining their 40 percent guarantee. Moreover, BOX limits who can respond to PIP orders in pennies, which obviously limits the universe of market participants who can improve the price of the customer order (which, of course, also limits who can interfere with a member's internalization plans).

I could go on in great length on this subject. The ISE did in three different comment letters on BOX, but to no avail. That does not mean that we have to make the same mistake on Mars. I suggest we adopt the following rules for our market:

- Limit internalization/facilitation to those situations where the internalizing firm brings value to the market. The only situation in the United States where exchanges have proven such value is for the execution of larger orders. Allow facilitations of 50 or more contracts, and limit the size of the entering firm's guarantee to 40 percent. Require that the order be exposed to the trading crowd before the entering firm can trade against any portion of the order. For an electronic market, that means at least a three-second exposure; for floor-based markets, that means at least an announcement in open outcry of the order and a reasonable opportunity for people to respond.

- Do not allow firms to shop orders. If a broker-dealer brings an order to an exchange to facilitate the order, the broker-dealer should execute the order on that exchange absent compelling reasons to take the order elsewhere. The only compelling reason can be for the firm to get the customer a better price. Any firm engaging in even this limited form of shopping should bear the burden of proving that it sought to benefit its customer.

- Do not allow internalization of small orders. Removing small orders from the auction harms investors generally by jeopardizing the pricing mechanism. If we do err and permit internalization of small orders, we will need to be vigilant and closely monitor the effect of internalization on the market, both for the orders being internalized and the market place as a whole. The market permitting small order internalization will have a heavy burden to show the benefits of such trading.

- Finally, do not allow directed orders or preferencing. The heart of an auction is for market makers to compete for order flow based on the quality and size of their quotations. PFOF itself probably does not directly affect quotation competition, since market makers still must quote aggressively, and in size, to be awarded order flow in an exchange's trading algorithm (at least on the ISE). However, allowing firms to preference orders to market makers of their choosing does lessen quote competition. It also channels competition from the open and visible disseminated quotes to hidden factors, such as PFOF. Preferencing benefits the market maker and the entering firm, not the investor. We must maintain our Martian focus on investor protection.

Market Maker and Specialist Guarantees

A "specialist" is a market maker with unique duties to the market. Depending on the specific market, specialists may have to open trading in the market, handle customer orders when there is a better market away and provide continuous quotations in all assigned option classes. Other market makers have more limited duties, and generally do not have to quote in all their assigned classes. To make matters as confusing as possible, different exchanges have different names for their specialists, such as Designated Primary Market Maker, Lead Market Maker and Primary Market Maker.

In recognition of their heightened market obligations, exchanges generally provide specialists with a number of benefits. Indeed, without such incentives there would be no reason for any market maker to assume the role of a specialist. The incentive of most interest to us (and to the Commission in its Concept Release) is the enhanced allocation specialists receive under exchange trading algorithms. For example, the ISE Primary Market Makers receive a 60-40 allocation if the PMM and one other broker-dealer are at the inside market and the PMM is quoting for sufficient size at that price (but only after all customer interest is satisfied at that price). Generally, PMMs receive at least a 30 percent allocation of an order if they are at the best price in sufficient size. The Commission asks for comment on the whole area of specialist guarantees, including the effect of "removing" the guaranteed percentage of the order from the auction, an issue similar to the internalization issue.

After reviewing this area in great detail, we believe that this is an area that we generally should leave to competitive evolution. Exchanges should have much flexibility in developing their own trading algorithms, including how to reward specialists and other market makers. The overriding constraint should be the same as with internalization: not permitting specialists or any other market participants to remove a significant percentage of the order flow from the auction due simply to their status in the market. The ISE slight preference in allocating order flow to PMMs seems reasonable, at least for the ISE. On that exchange, the PMM must be competitively quoting in sufficient size at the best price to participate in the trade at all. That rewards PMMs for performing their obligations to the market, and is not intended to as a vehicle PMMs would use to attract or internalize order flow. Moving to as high as 80 percent, as the Phlx once proposed, is preposterous. While we should ensure that there are limits within which exchanges must operate, we must avoid the urge to micromanage the auction process and force all exchanges to operate according to one model.

A relatively new concept now being discussed in the United States is having multiple specialists in an option. This clearly is something we should permit if exchanges see this as an innovative way to compete. Having said that, there are some warning signs that we will need to monitor as we consider how best to guide the development of our market. First and foremost, multiple specialists can be used to disguise internalization or foster PFOF. This is especially dangerous if firms can direct orders to specific specialists, such as an affiliated firm (to internalize order flow) or a firm that pays for its order flow.

The best way to analyze multiple specialists is to understand that specialists perform only the limited functions noted above. If an exchange splits these duties among multiple firms, it should split the rewards among those firms; that is, the regulatory authorities should not permit an exchange to "double up" the rewards by granting each specialist, say, a guaranteed 30 percent of the order. Rather, the 30 percent should remain constant, to be divided by the number of competing specialists entitled to participate in the trade. The obligations do not multiply simply because the number of specialists multiply. While it seems obvious, it is also worth mentioning that no "specialist" should receive any benefit simply due to a title bestowed on it. Rather, a firm should truly be subject to specialist obligations on an exchange in order to justify the receipt of any specialist benefits.

We can summarize our views on market maker and specialist guarantees for our market as follows:

- Exchanges should have considerable discretion in determining how to reward specialists and market makers for their contributions to the markets; the regulator should only set reasonable boundaries within which the exchanges must operate.
- Any benefits specialists and market makers receive must be reasonably-related to the specialists' obligations to the market, which could vary from exchange to exchange.
- Multiple specialists certainly is one possible market structure, but in any such market all competing specialists must have obligations to the market in order to enjoy any structural benefits in that market. Moreover, the overall rewards to specialists should not increase when there are multiple specialists. Rather, when multiple specialists share benefits, the maximum permitted benefits to an individual specialist should be spread over all the specialists. We can understand diversifying risk and responsibilities over multiple specialists. However, we do not see any policy reasons or regulatory benefit to permit a firm to designate which specialist should receive its order flow. That is just another type of preferencing that would foster internalization and PFOF.

<u>Regulation of Broker-Dealer Best Execution Obligations</u>

Exchanges both run and regulate their markets. Generally, there is minimal conflict between these two functions, especially with a strong government regulatory body such as the Commission overseeing the exchanges' activities. However, a conflict does arise when exchanges regulate their members' "best execution" obligations, a concept that we discussed a number of times earlier in this report. If best execution was a simple, objective rule with clear-cut standards to apply there would not be an issue. However, best execution is quite complex and subjective.

To meet their best execution obligations, broker-dealers first must implement procedures to determine to which exchanges they send order flow. Firms then must apply and follow those procedures. However, compliance is not as simple as directing each individual order to the best quote at a given time. Indeed, the Commission long has held that best execution does not require order-by-order routing. In recently proposing Regulation NMS in Release 34-49325 on February 24, 2004, the Commission discussed best execution as follows:

> The Commission recognizes that execution price and speed of execution are not the sole relevant factors in obtaining best execution of investor orders, and that other factors may be relevant, such as (1) the size of the order, (2) the trading characteristics of the security involved, (3) the availability of accurate information affecting choices as to the most favorable market center for execution and the availability of technological aids to process such information, and (4) the cost and difficulty associated with achieving an execution in a particular market center.

To discharge this ever-evolving obligation, broker-dealers must analyze prices, the size of quotations, the likelihood of achieving an execution at a given time, and the cost of that execution. As the Commission noted in 1996, layered on top of these considerations are the PFOF and internalization issues we already discussed. Thus, measuring compliance with best execution requires significant subjective judgment as to whether a broker-dealer is exercising its discretion appropriately. Perhaps the ISE best summed up the difficulties exchanges face in policing this area in its February 2003 letter to then-Chairman Pitt:

> While we believe that the ISE has a strong regulatory program in this area, we recognize that it is difficult for a single exchange to police a member's compliance with its best execution obligations. It would be difficult for us to bring an enforcement action against a member for trading on another exchange if we believed the ISE had a superior market. Such an action would raise obvious competitive conflicts. There would be similar conflicts in us bringing an action against a member for trading on the ISE, rather than sending an order to another market.

It is instructive to review the experience of the equity markets in conducting best execution surveillance since the 1996 adoption of the order handling rules. In that market, exchanges focus their surveillance efforts on ensuring that a broker-dealer has reasonable procedures for making order-routing decisions, and that the broker-dealer follows those procedures. The same would make sense in options. Exchanges should enforce the objective portion of best execution regulation: ensuring that members establish procedures to make order-routing decisions and that they apply those procedures.

In the event that an SRO finds evidence that a broker-dealer is not complying with its procedures and is not achieving best execution of its customers' orders, the SRO could refer the matter either to the Commission or to a neutral party for possible prosecution. Such neutral party could be the government regulator itself, but we know that at least our authorities prefer not to be the first-line regulator in these intensely factual situations. An alternative would be a truly-neutral SRO that is not involved in the options market makes sense. In the United States, this could be the NASD. While that SRO currently owns the American Stock Exchange (the "Amex," which does run an options market), there seems to be sufficient structural separate between these two SROs to guard against both actual and perceived conflicts. In addition, the NASD is in the process of divesting itself of the Amex.

Perhaps one piece of good news in this area is that we do not think best execution will be a significant problem in our options market if we follow the U.S. model. As I noted at the outset, all trading in the U.S. options market takes place on one of six registered exchanges, with a fairly efficient linkage connecting those exchanges. This makes it easier to reach across markets to get customers the best price. Exchange members also are subject to a trade-through liability, and face disciplinary action if they engage in a pattern or practice of trading through other markets. They face financial liability any time they trade through a customer order at a better price on another exchange. This is in stark contrast to the equity market, where there can be significant trading off exchanges, outside the reach of linkages and trade-through rules, especially in the Nasdaq market. The regulatory framework in the options market presents broker-dealers with fairly clear rules to follows and limits the chances that they will not provide customers with best execution of their orders.

To summarize the lessons for our market, we recommend as follows:

- Best execution is a bedrock principle of securities law and necessary to establish confidence in a competitive market structure such as we envision for options trading. However, one of the consequences of competition and self-regulation is that there are areas in which conflicts can arise. Best execution is one.

- Exchanges generally should oversee the objective aspects of best-execution regulation, the need for members to establish procedures governing order-routing decisions and to follow those procedures. A neutral SRO, or, failing that, the government regulator should have responsibility for policing the more subjective aspects of best execution.

Exchange-Provided Data on Quality of Executions

Regulatory initiatives in the U.S. options market generally lag a few years behind the changes in the underlying equity markets. As we noted in our introduction, only recently has the Commission applied the Firm Quote Rule to options. Similarly, there had been a linkage in place for equities for more than 20 years before the Commission mandated the same for options. The NBBO also was long established for equities before migrating to the options market. The Commission's concept release now requests comments on whether to apply a relatively recent equity market rule on market quality data (Rule 11Ac1-5 under the Exchange Act) to options.

Rule 11Ac1-5 requires an equity exchange to publish monthly reports on the execution quality of agency orders that members send to that exchange for execution. However, the rule does not apply to the trading of options. Many of the execution quality statistics rely on a commonly-applied NBBO, and, as noted above, there was no uniform NBBO of options in 2000. With the options exchanges now offering an NBBO through OPRA, the Commission asks whether it should now extend the rule to options.

I certainly think that on Mars we should wait before requiring exchanges to post execution quality statistics for derivative products. It is not as simple as taking a rule designed for one market and imposing it on another market. For one thing, it will take some time for the options NBBO to be accepted in the market. As of now, few vendors carry the options NBBO. Also, the options NBBO differs from the equity NBBO in that OPRA has adopted minimum price change ($.05) and volume change (10 contract) requirements in calculating the NBBO. In its filing SR-OPRA-2002-01, OPRA explained that these limitations were due to processing and network capacity concerns:

> By proposing minimum price and size increments for purposes of the BBO at five cents and ten contracts respectively, OPRA has attempted to strike a balance between the need to show meaningful price and size improvement, and the need to keep the capacity demands of the BBO service at a level that is significantly less than the capacity demands of OPRA's full service. As OPRA, vendors and subscribers gain experience with the BBO Service, there may be adjustments to these minimums, either up or down, in order to maintain the balance of meaningful market data and manageable capacity demands.

While it is not yet entirely clear, these limitations on the NBBO could skew the quality statistics and make this NBBO less meaningful for market quality analysis.

Also, there are fundamental differences between a "cash" market such as the stock market and a derivative market such as options. In options, pricing is derived off the cash market and liquidity is spread over many series of options on the same underlying stock. Thus, it may not make sense simply to apply the same rule to both stocks and options. Rather, any rule applying to the options market should be tailored specifically for that market.

We can summarize our recommendations for our market as follows:

- A uniform market quality measure makes sense for most markets, including the listed options market. However, a key to such measurements is a uniform NBBO that accurately reflects the price and size of competing quotations. In the United States, the NBBO is not yet sufficiently developed or accepted to support such a rule. On Mars, we should wait until we develop an accurate and industry-accepted an NBBO before applying a uniform market quality measurement to a product.

- Any market quality rule must be tailored specifically for each product covered. Some markets concentrate liquidity in one instrument, while other markets diffuse liquidity over multiple products. In addition, some markets have rapidly-changing quotations that tend to "flicker." This is especially true in options, where quotes can change due to changes in the underlying stock, changes in volatility and a variety of other factors. This is a situation where one size does not fit all; we will need to fashion rules that fit each market.

<u>Trading Increments</u>

A major regulatory topic in the United States over the last few years has been the minimum dollar amount in which market participants can quote and trade securities. If you examine reports regarding some of our earliest journeys to Earth hundreds of years ago you will find references to "pieces of eight," in which Earthlings divided their currencies into eighths. Translated into modern U.S. dollars, the result was trading units of $.125 cents, or eighths of a dollar. The folly of this became apparent when markets cut this increment in half, into sixteenths. The Commission then ordered the markets to convert to decimal pricing, with penny increments for both quoting and trading in equities. The Commission recognized that penny pricing may not be appropriate for options, due mainly to concerns regarding the increase in quotation traffic that likely would result. Options now trade in nickel and dime increments, depending on the price of the option.

The Commission's Concept Release asks whether options should trade in pennies. While the release presents the possible benefits of such a change, this tells only half the story. The Commission correctly notes that post-decimalization studies show a decrease in quotation spread in equities following the move to pennies. The Commission also discusses the conclusion of some commentators that the move to pennies has curtailed PFOF on the stock side. Noting that PFOF continues in options, the Commission hypothesizes that this could be a "symptom of inefficient pricing in the options markets, [and] removing the five-cent and ten-cent minimum price increments in those markets might allow the markets to price options contracts more accurately, which could result in a narrowing of spreads."

But there is another side of the story. While the Commission cites studies that show a decrease in quote spreads following decimalization, there is a continuing debate regarding the *overall* effects of decimalization and pennies in the equity market. While there is general agreement that spreads have narrowed following the move to pennies, there also is strong evidence that there are other, negative effects of penny pricing that harm investors.

By spreading liquidity over more pricing points, penny pricing appears to have decreased the depth of quotations. So concludes Chakravaty, Wood and Van Ness in a paper entitled "Decimals and Liquidity: A Study of the NYSE," published in the March 2004 issue of *The Journal of Financial Research*. Thus, while investors with small orders may be able to get a penny or two better for their orders (since they do not seek deep markets at the inside quote), this could be a problem for institutional investors with larger orders and large retail traders. Indeed, Bollen and Busse in a draft paper entitled "Common Cents? Tick Size, Trading Costs, and Mutual Fund Performance," dated May 2003, "find an economically and statistically significant annual increase [in mutual fund trading costs] of 1.367 percent of fund assets following the switch to decimals for actively managed funds." As institutional investors seek to execute larger orders, they must effect multiple trades at multiple price points leading to an increase in what these authors call "trading costs," defined to include bid-ask spread, commissions and price concessions. These costs go directly to the bottom line of the fund and come out of the pockets of the millions of individual investors in the United States who own mutual funds.

With conflicting evidence on the benefits of penny trading for stocks, we do not quite see any reason to bring pennies to options at this time. Two additional factors underscore our concerns. First, the main area for growth in options is on the institutional side. Institutions currently hedge risk in the over-the-counter market, if at all. The options exchanges are trying to bring these investors into the listed market, where there is greater transparency and where their participation can lead to greater liquidity for all market participants. Moving to penny pricing, with increased institutional trading costs, certainly would dampen these efforts.

Second, as the Commission acknowledges in the Concept Release, quotation traffic is a major problem in the options market. Earth is light-years behind us in developing bandwidth, still relying on wires and fiber to transport data. With hundreds of thousands of actively-quoted options series, quote traffic is an ever-increasing burden on the options exchanges, market participants, market data vendors and end-users. Quotation traffic continues to grow as more exchanges offer competitive market making, which increases the number of quotation updates an exchange generates. Furthermore, as approved by the Commission in Release No. 34-48822 on November 21, 2003, the options exchanges now must purchase their own capacity from OPRA. Early indications are that all exchanges will seek to purchase excess capacity to help ensure that they do not run out of bandwidth, fueling the need for more capacity.

However great the current demands on capacity, they will pale in comparison to the effect that penny trading will have on options quotation traffic. While estimates vary, it is likely that penny trading would lead to an unparalleled traffic increase. This could lead to "flickering" quotes (a wonderful term meaning that the price for an option moves more quickly than the less-developed human eye can see), obscuring the true price for investors. Without any clearly-demonstrated benefits to the investing public in this area, it is hard for us to see a basis for the Commission and the exchanges considering penny pricing seriously at this time. We can summarize our recommendations for our market as follows:

- Markets should have reasonable discretion to set their own quotation and trading increments. The government should get involved only if there are obvious competitive or investor protection concerns due to increments that are either too wide or too narrow.
- Establishing the proper increments is not easy, and requires detailed analysis of, among other things, the effect of the increment on spreads and liquidity, transparency, and the ability of the market place to support the market data traffic that will result from the established increments.
- Minimum increments need not be the same for the underlying security and derivatives. In stocks, liquidity is concentrated on the underlying cash instrument; in options, liquidity is dispersed among multiple series. Dispersing liquidity even more among multiple pricing points could compound the liquidity problems that penny pricing has fostered in the U.S. stock market.
- There is no current evidence indicating that regulatory action is needed to require that our options market use the minimum trading increment in the stock market.

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All in all, our trip to Earth was most pleasant. We saw some exciting baseball and we are pleased to report on the tremendous growth and development of the U.S. options market. This success demonstrates that the exchange community and a government regulator can work together for the benefit of investors. However, the relationship needs to be properly balanced and the government should intervene in the market only when there is a demonstrated need and the industry itself cannot respond. In the U.S. options market, the only such area is the current monopoly state of index options. In our view, the Commission should focus its regulatory efforts on fixing that problem, ending PFOF and limiting facilitations to larger orders. Other than that, the Commission should let the markets continue to evolve and to grow on their own (with gentle nudging from time to time).