

## Stealing The Rope With Which To Hang Us

Most conspiracy theories aren't worth the vapors they're concocted from; we don't need something elaborate to explain what happens simply in the course of human events. Your loyal correspondent labored for years in the oil industry, which forever was being accused of plotting against the citizenry. In reality, industry representatives couldn't agree on pizza toppings, which helps explain how this bunch of not-so-great Satans woke up one day to find their ranks diminished by Amoco, Arco, Gulf, Mobil, Texaco, Getty, Marathon, amongst others.

An important exception to the above rule surfaces frequently in the world of options trading. Greed is our second most powerful emotion and our second greatest pleasure, and the leverage afforded in the options markets provides the means and opportunity for those who choose to break the rules to make a quick buck. The market surveillance departments of the major options exchanges, including the Chicago Board Options Exchange, the Pacific and Philadelphia Stock Exchanges, and the American Stock Exchange are quite experienced at ferreting out the plans of the nefarious, who generally trade on inside information.

It appears, chillingly, that one group of inside traders may have been the very terrorists who have brought us so much grief. Alarm bells rang from the options trading of issues likely to be affected by their plans, including airlines UAL and AMR, Boeing, insurers such as AIG and Citigroup, and brokerages such as Merrill Lynch. Overseas insurers such as Munich Re saw unusual trading in their options in Europe.

### **A New Level of Evil**

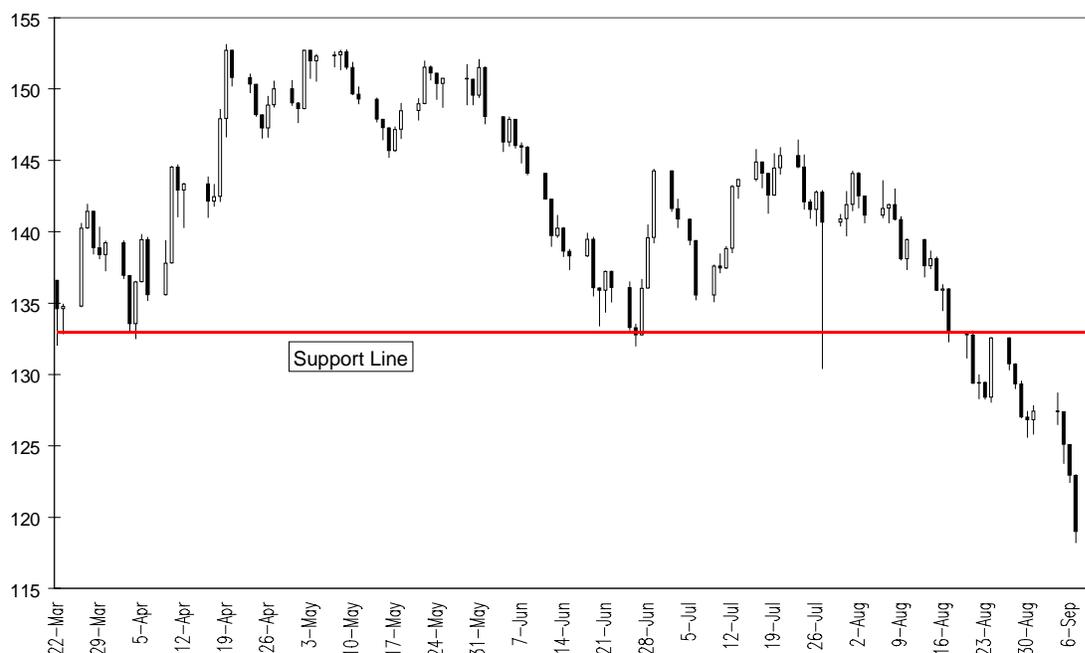
The most common clues of something being amiss in options trading are unusual volume, a jump in volatility, or either of these two developments occurring in conjunction with confirming price movement in the underlying stock. Options volume per se doesn't tell the whole story, as many options traders and market makers engage in non-directional "precision" strategies designed to take advantage of unusual volatility differentials between months and strikes or to arbitrage positions against each other.

Many of these strategies such as the "box" trades used by floor traders to borrow and lend money, involve large volumes of both put and call options. Other common trading strategies, such as "verticals" involve the simultaneous purchase and sale of call or put options at different strikes. Readers are invited to visit <http://www.cboe.com> to learn more about the mechanics of these trades.

It is only those obviously directional trades, the large purchases just puts or just calls without any offsetting spread positions, that really jump out. Not only do these trades indicate something's up, but they often force market makers into buying or selling stock as a hedge. A market maker who sells puts to terrorists is incurring an obligation to buy the stock at that strike price, and is quite likely to sell the stock as a hedge. Let's take a look at put option trading in the two airlines, UAL and AMR.

First, it's important to remember the airlines were in trouble before September 11. The 10-member Amex Airline Index (XAL) had already lost 30% of its value since the start of the year. Critical horizontal support had broken, tested from below, and a classic waterfall decline started to form on the chart. These stocks were not in any shape to withstand the upcoming onslaught.

### Candles In The Wind: XAL Prior To Terrorist Attacks



Next, let's take a look at the option volumes and volatilities in the three days up to and including Monday, September 10, 2001. At the time of the attacks, the at-the-money strikes for UAL and AMR would have been \$35 and \$30, respectively, but the questionable activity in UAL took place at the \$30 strike. The suspect volumes are highlighted.

#### AMR Oct. \$30 Strike

|         | Call<br>Volume | Call<br>Volatility | Put<br>Volume | Put<br>Volatility |
|---------|----------------|--------------------|---------------|-------------------|
| 9/6/01  | 10             | 35.5%              | 23            | 35.0%             |
| 9/7/01  | 45             | 38.4%              | 125           | 42.7%             |
| 9/10/01 | 48             | 48.5%              | <b>1535</b>   | 52.8%             |

#### UAL Oct. \$30 Strike

|         | Call<br>Volume | Call<br>Volatility | Put<br>Volume | Put<br>Volatility |
|---------|----------------|--------------------|---------------|-------------------|
| 9/6/01  | NA             | 36.2%              | <b>2000</b>   | 38.3%             |
| 9/7/01  | 3              | 35.1%              | 10            | 41.0%             |
| 9/10/01 | 10             | 37.1%              | 100           | 42.0%             |

The highlighted options exhibited exceptional volume, and they clearly were not part of any spreading strategies; I looked in vain at all surrounding months and strikes for anything that could have qualified as the other leg of a legitimate strategy. Only the puts were active, and volatility clearly was skewed toward the put side. The buyer of the AMR puts on the 10<sup>th</sup> was willing to pay a substantial volatility premium for the privilege of executing the order.

Option market makers tend to live for such volatility discrepancies. Normally, the high put volatility for the AMR Oct. \$30 put would lead to the following trade pair:

1. Sell the overpriced natural put at 52.8%
2. Sell AMR stock and buy the Oct. \$30 call, a combination called a synthetic put, at 48.5%.

That this trade didn't happen, or that the parallel trade for the UAL options on September 6 didn't happen stands as testimony to the normal low volume and illiquidity of these option contracts. Such volume in these options should have set alarm bells clanging immediately.