

2.2 Stock Second - Long-term Technical Analysis

Chapter 1: Long-term Technical Analysis

In this section you will learn how price action is used to find the best stocks. If we can quantify trend strength, we can search for it.

You've learned how to form a market forecast and how it drives all of our decision making. It determines our trade duration and how aggressive/passive we will be with our position sizing. Instead of trading the S&P 500, we are going to find the strongest component of that index and we are going to "ride the fastest horse". In this section, we will identify the stock characteristics and patterns you should be looking for.



If you are going to pick the fastest horse in a race, you are likely to look at what it has done recently. Stock charts provide us with that information. We start with a longer time frame and then we look at recent performance. Trendline breaches, price patterns, relative strength, volume and a variety of technical indicators help us to gauge strength. We call these "checkboxes". The more of them we have marked, the higher our odds of success. We might not always have a great read on the market, but we can always find a strong stock. There are thousands to choose from and we never compromise. In this

section we will teach you what to look for in a stock.

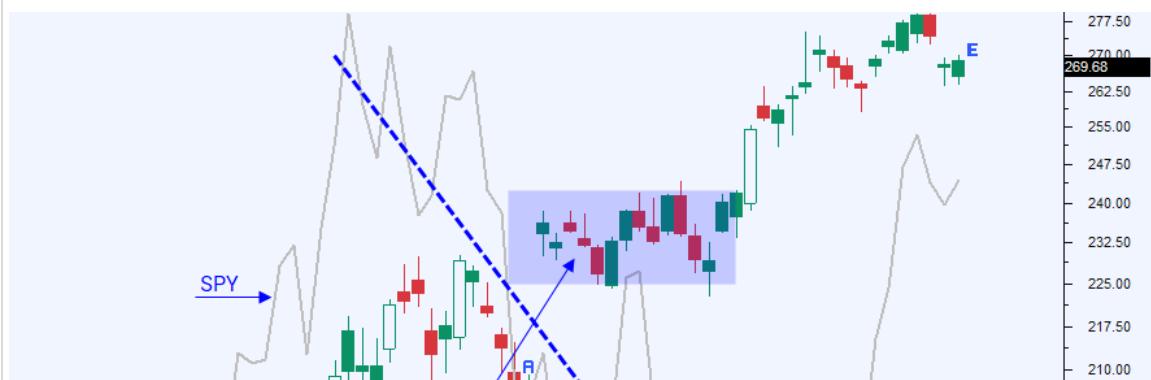
Chapter 2: Stock Technicals We Want To See

A combination of these technical qualities need to be present regardless if you are day trading or swing trading.

In the previous article, we discussed knowing the longer-term personality of the stock. Provided that the stock has the characteristics we want, we are ready to drill down and take a closer look at the technicals that make the move attractive. The goal is relatively straight forward; we need to find opportunities where the next move is predictable. Consider the list below to be D1 checkboxes. The more of them that are marked, the better your odds. I am going to reference the long side to keep this simple, but the same concepts apply to the short side.

Relative Strength

Relative strength (RS) is the edge we trade so it needs to be at the top of the list. Relative strength tells us that institutions are active and our goal is to follow the “smart money.” In my experience, there is no better indicator for predicting future price movement. We need relative strength on a longer-term D1 basis. It is even better if we have it across multiple time frames (M5-D1). When the market has been in a two week decline and the stock is moving higher during that period, institutions are accumulating it. They don’t care about the current market dip; they want to own this stock long-term. When the market finds support, this stock will lead the charge higher. If our timing on the market is early and the market continues to drop, stocks with RS will be resilient. Buyers are lined up and this support will provide us with cushion. If we are completely wrong on the market we can exit the stock with little to no damage and we adjust our market thesis. If the market is close to forming support and the stock is holding strong, we can try to weather the storm. We are always trying to limit our downside risk and maximize our upside potential. Following the “smart money” using relative strength allows us to do that. This is our “edge.”



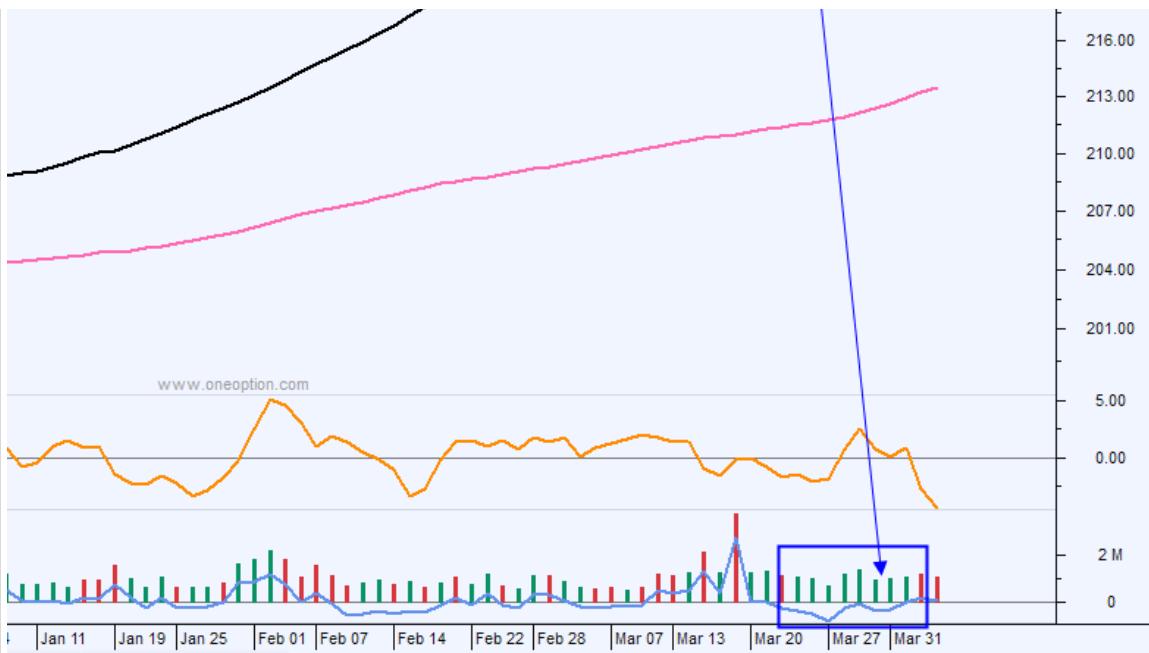


Relative strength tells us that the “smart money” is buying this stock and our goal is to follow them.

Volume

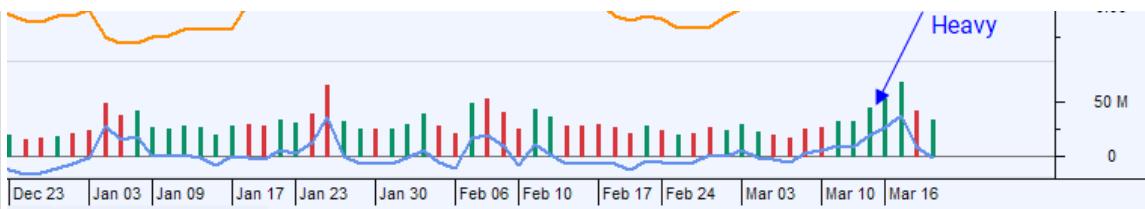
Volume is the second most important factor. If there is no volume, the “smart money” is not participating. Regardless of the technical qualities we discuss in this article, they are meaningless without volume. Light volume moves look good on the surface (price candles), but they are easily reversed. On the other hand, if we have relative strength or a breakout on heavy volume, it is legitimate and we can expect follow through. Just because this section of the article is short, do not discount the importance of volume. It is critically important when we are trying to predict future price movement.





This stock broke through horizontal resistance, but there was no volume. That means there is a good chance it is not going to hold.





This breakout through the major moving averages and the down trendline on heavy volume is likely to continue.

Orderly Trend

We want to trade stocks that trend. Some stocks make sustained directional moves and others do not. Once the move begins, we want to see it continue. Stocks can change their personality and this is easy to spot on a D1 chart. If the stock is trading in the lower quadrant of the 60-day range it is likely to be in a down trend. Before we consider buying a beaten down stock, at very minimum it has to breach a High- trendline. At that low level, we should expect that the stock is more likely to continue that down trend than it is to bounce. Once the stock makes a higher low double bottom, it breaks through a High- trendline and it has been able to rally above a major moving average we can consider that the down trend is reversing and that an up trend might be starting. A stock that is consistently making higher lows and higher highs is in an up trend and that makes it easier to predict where it is going. Trends that are in the middle of the range are fairly reliable to trade. There is still plenty of upside until it hits the upper end of the range. Some traders will not buy a breakout to a new all-time high. It's true that you have to tread cautiously when you buy these breakouts, but these can be very lucrative trades. The key is a long green candle closing on its high on heavy volume through that resistance level. Then, we want to see follow through. We discussed breakouts to new highs in the previous article. Remember that we do not want to buy these breakouts if the stock had to travel a great distance to get to resistance and we need to be careful if there are multiple trendlines near the high. We do not want to poke at resistance, we want to destroy it.





We want to trade stocks that trend well. Avoid buying stocks that are in the lower quadrant of the range and avoid shorting stocks that are in the upper quadrant of the range. These stocks are trending and we need proof that the current trend is exhausted.

Middle of Range

A strong trend is important, but we do not want to chase run-away stocks that have gone parabolic. We can day trade those stocks, but we do not want to be the last person standing when the music stops. When the stock rallies well above its EMA 8, you should avoid buying it. You need to wait for a pullback. The stock has run hard and support will be much lower. That means it could retrace a good distance before it finds support and a wide stop will not protect you because there is too much downside. If this move higher has come on heavy volume, then it has a strong “flag pole”. Pullbacks to the EMA 8 will typically establish support. When that dip reverses, the short-term down trendline will be broken and bullish flag will form. That is when you want to enter. Ideally, you want to catch these stocks on the first major breakout.



Gaps up represent a temporary buy imbalance. They are not all created equal and if you are going to

trade gaps, you need to know what's driving the stock. Some gaps could be related to a market gap up. "All ships rise with the tide" and extra caution should be used when the stock is just following the market. Some of these moves hold, but most of them don't. Make sure that the gap is related to material news that is specific to the company and that changes the outlook for its earnings. A brokerage upgrade would not qualify as material news. The stock will make a temporary move on an upgrade and then it will retrace. New proprietary technology that is gaining industry acceptance and that is patent protected would be an example of the type of news you can get behind. You'll know the "real deal" when you look at the price action. If the volume is heavy, institutions are scrambling to exit shorts and to get long. A gap up through technical resistance levels will confirm the strength of the move. We want that gap to hold and we want to see follow-through buying. Sometimes, the stock will stack green candles on heavy volume. This tends to be the case when the initial gap is relatively small and this gives you time to join the move.



This is a much better gap. The stock has been gradually grinding higher and it has a breakout to a new high. The post earnings candle closed on its high and there was immediate follow-through buying. That is a sign that institutions want to own this stock and that they like the news.

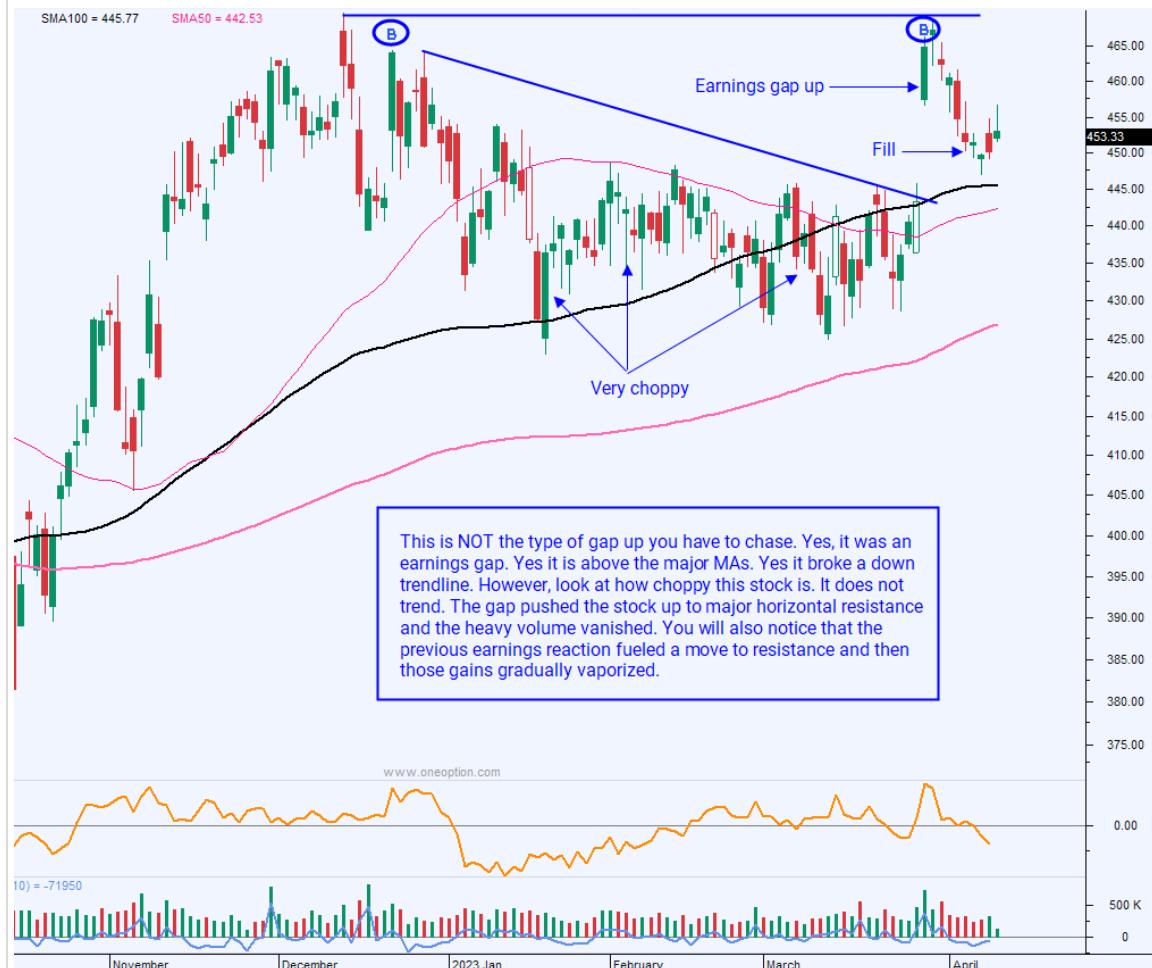
When the gap is large, the stock could simply tread water for a few days. This would be typical for an earnings reaction. The big move sparked profit taking and those sellers are keeping a lid on the stock. This is fine and it is perfectly normal. In time, that selling pressure will subside and buyers who were hoping for a dip will get anxious. The fact that the stock has not retraced tells you that the bid is strong. Buyers will gradually raise their bids and the stock will start the next leg higher. When we see stocks that are gapping, we want the opening of the gap to be preserved. If that opening price is breached, the stock is likely to fill in some of the gap, especially if it fails in the next day or two.



This was a nice gap higher above technical resistance to a new high. The bid remained strong and the stock did not retrace. In time, buyers got more aggressive and the stock advanced.

Some gaps up will fail. Here are some patterns to watch for. If the stock made a big move (10%+) just to get to a resistance level in a relatively short period of time (1 month), it has used a lot of energy to get there. It is likely to have sellers who are anxious to take gains, especially on a nice gap higher. When a stock gaps up to a major technical resistance level, you should be very cautious. The selling pressure at that price level will be heavy and the odds are high that the stock will retreat. The exception would be a breakout through that resistance the next day on a long green candle with heavy volume. We need that breakout a day or two after the gap up. Buyers will have to prove that they want to buy the stock or the selling pressure will build with each passing day. Sellers who thought they might fetch a higher price on a breakout become more willing to take gains at that resistance level.

When a stock breaks through resistance, we want it to have plenty of room before it gets to the next resistance level. That will provide the stock with smooth sailing. Stocks with poor, choppy price action and no upward momentum are also likely to fill some of the gap. We know that we should avoid trading these stocks. They need to prove that they are ready to breakout and they do so by stacking long consecutive green candles on heavy volume. Until they do that, we avoid them knowing that they are likely to resume the old pattern.



This stock does not trend well. It is choppy and rangebound. The gap up is testing major horizontal resistance. There is a good chance that high will hold and that the gap up will lead to profit taking.

Sector strength is not something you will typically notice on a chart unless you overlay the sector ETF. Institutions often rotate assets between sectors and groups and often that is the source of the stock's relative strength. It is important to recognize this influence for a few reasons. First, when a sector or group gets "hot," it is likely to stay that way for at least a few days. Realize that these moves will have "ebbs and flows" as the money flows in or out. There are "pairs" traders who look for highly correlated stocks and they trade the spread between them. They are long one stock in the group and short another. You do not have to chase stocks that are fueled by sector strength. This is much different than a move that is fueled by news for an individual company. Those trends tend to be much more

consistent during the day. Fundamental news for that particular sector or group is fueling the move. In some cases the rotation is fast and furious and there is a sense of urgency. A bank failure would send a shock wave through the financial sector and fear would spread quickly that another failure is likely. Higher oil inventories might weigh on the energy sector, but that move might not be dramatic and it typically runs its course in a day. New patent legislation could affect the earnings for pharmaceutical companies. The impact needs to be estimated by institutions and it will vary from one firm to another because of the pipeline and portfolio of drugs. There are many possible laws that can be passed. Some will impact the entire sector, some will impact a specific group and some will weigh heavily on a particular company. Price action is always the key. If you are using a “top down” approach, look for the leader and stacked consecutive green candles of a single color on heavy volume. There are a few issues with leaning too heavily on sector or group strength. One is that the lines between sectors and groups are often blurred. There is overlap (the definitions are similar). The second is that companies might straddle different sectors and groups. For instance, is Amazon a tech company or a retailer? Some sectors and groups like energy/oil producers are narrowly defined and the stocks move in tandem. When the sector is commodity based, it is important to realize this. They are going to be highly correlated to the commodity price and less correlated to the SPY. That means that watching the price of oil is more important than watching the price of SPY. Some oil producers hedge future prices and some don’t. That means that some stocks will react more to the price of the commodity than others. Because this is a commodity it also means that long term fundamentals are less likely to make giant sustained moves. Compare this to a company that just released the fastest GPU ever made. This is unique to the company and it might adversely impact other stocks in the group (competitors). The other issue is that many companies are diversified. They do not belong to one sector or group, they belong to many. The final issue is that each of the companies within a group or sector can vary greatly. For instance, not all retailers are created equally. Walmart and Macy’s are both retailers, but their performance and target market is dramatically different. I am often asked if it is best to trade an ETF for a sector instead of a stock. The answer is NO! That line of thinking would suggest that we don’t know how to identify the strongest stock in the sector or group. We want to ride the fastest horse in the race! If you take that ETF line of thinking to the next step, why don’t we just trade the SPY. That is an ETF as well. When we do that, we lose a very important edge.





Pick the strongest stock in the sector or group and don't trade ETFs. We want to ride the fastest horse in the race.

Strong Technical Breakouts

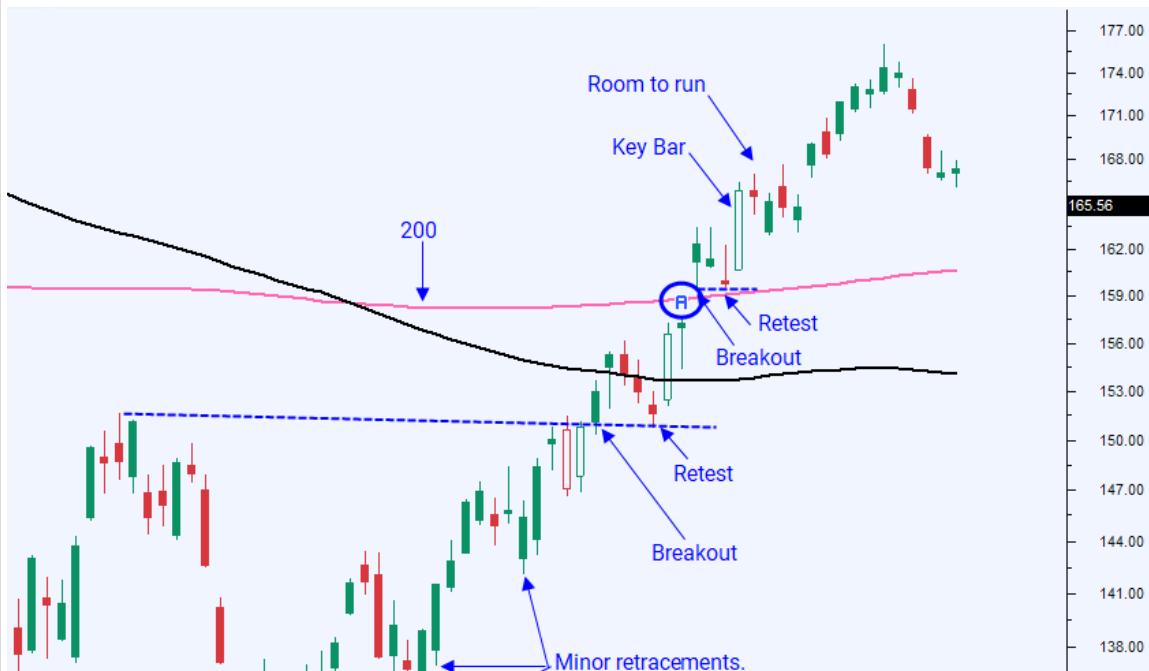
When we are trend following, we can also look for specific candles to gauge the strength of the trend. We are looking for nice stacked green candles and heavy volume. We want minimal retracement back into those candles. Alternatively, consecutive candles of a single color with a nice orderly grind higher will also work well. When the stock breaks out to a new high through a resistance level with a nice long green candle and that candle is followed by a bearish engulfing candle, we need to tread cautiously. That is a sign of a buying climax and a possible reversal at a relative high. That breakout is likely to fail. In the first chart below you can see how the stock has been in a longer term downtrend. It has spent months struggling to recover and the price action into the bullish breakout was choppy. The Key Bar looked great on the surface, but the breakout had very little room to run because of the 200-day MA. This was not a good breakout and it failed the next day.





This stock was trying to recover from heavy selling. It was trying to breakout, but the price action into the breakout was choppy. There was also very little room for the stock to rally because of the 200-day MA.

If the stock breaks out above a major resistance level and then it tests that breakout and a bullish hammer appears, it is a sign that buyers are still anxious to buy that breakout. In the chart below you can see a much better set-up. The stock has been strong relative to the market and the volume is good. It makes a series of higher lows and higher highs. It has a breakout before earnings that could have been day traded, but we do not hold into earnings. After earnings it had another breakout. The stock surged through the 200-day MA and it tested that breakout. Buyers were engaged and then the stock had a long green key bar. The buyers did not hesitate to buy that dip. They liked the news so much that they did not feel they would have another chance to buy the stock at the 200-day MA. This is a nice breakout that you can swing.

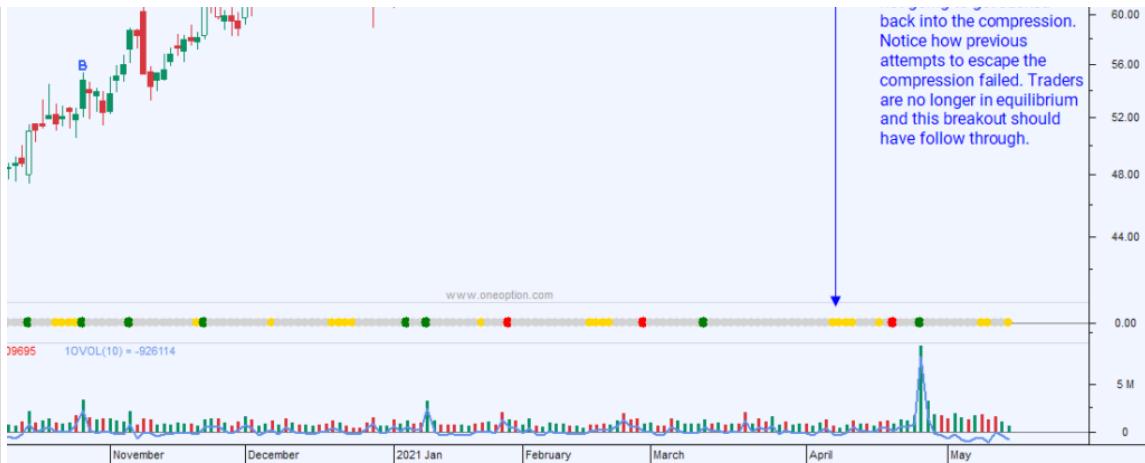




This stock has a lot of nice qualities into the breakout. The trend is strong, the volume is good and it has relative strength. After the earnings breakout, it tests the 200-day MA and then it is off to the races.

Price compressions are another pattern to watch for. Those breakouts tend to produce nice sustained moves once they have “escape velocity.” They need to clear prior horizontal resistance with immediate follow through or they will get sucked back into the range. A gap up through that resistance is desirable because much of the heavy lifting has been done in one bar. Moves through resistance often look good initially, but if you look back, most of the “probes” have failed. It is important to realize that a compression represents equilibrium. Buyers and sellers agree on the price. It is going to take material news to fuel a breakout one way or the other. Compressions are like a coiled spring. Once the breakout happens, there is follow-through and the traders scramble to adjust. In general, long tight compressions tend to produce sustained directional moves. The beauty of trading compression breakouts is that you can catch the move early and it has room to run. It’s “spring” and it has been trapped inside “all winter.” The key is to make sure that the breakout is not a head-fake. You want heavy volume and a long candle that closes well outside of the range. You should expect immediate follow through. If you don’t get that, there is a good chance that the stock will be drawn back into the compression. Double check the news to make sure the move has substance behind it.





Something changed. The stock was in equilibrium and that is why it was compressing. New information is available and the move has comfortably escaped the compression. Don't be fooled by fakes. You need volume and you should expect follow through.

Room to Run

When we consider a breakout through technical resistance, we want to know that it has plenty of room to run. We call this "Blue Sky." If the next resistance level is 1% away, there will be another roadblock ahead. Remember, the goal is low risk and high reward for any trade. Trendlines, major moving averages & horizontal support and resistance on a D1 chart need to be far away from the current price. For those of you who are NFL fans, you want Barry Sanders with the ball at the 50 yard line with no one in front of him. That is going to result a touchdown because no one can catch him. On a day trading basis, I won't even consider a long that is below the prior day high. If it can't clear that first hurdle, I have no interest in getting long... at all. The buyers don't even have enough strength to push the stock through a minor resistance level so the upside is limited. In the charts below, you will see stocks that have room to run.

Conclusion + Examples

Learn to recognize these D1 qualities when you are flipping charts. For simplicity I have only discussed the patterns we want for buying, but these same principles apply to shorting.

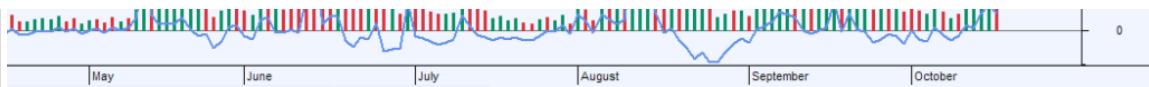
1. Relative strength
2. High relative volume.
3. Orderly trend.
4. No picking tops or bottoms.
5. Strong technical breakouts
6. Room to run.

Here are a few good charts that "have it all."



This stock has all of the technical characteristics we look for.





The more of these technical qualities the stock has, the better our odds of predicting price movement.



This stock also has all of the technical qualities we look for a

Clip source: [Long-Term Stock Characteristics We Like | OneOption - Stocks &](#)

nd it had a bullish flag formation as well.

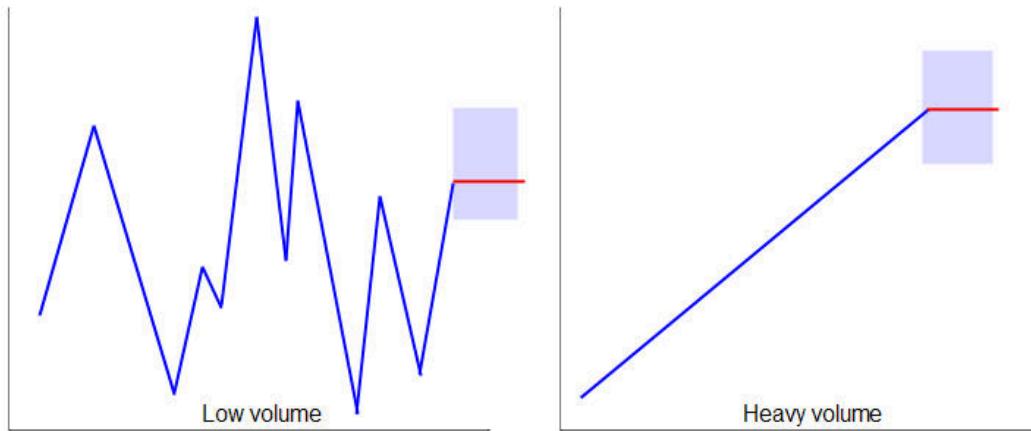
Chapter 3: Long-Term Stock Characteristics We Like

Every stock has its own personality and we like some better than others. Here are some general qualities you should look for before you dive deep into technical analysis. This process takes seconds and the skill is developed over time.

All of our stock analysis starts with a longer-term view of the stock. Before we get into technical analysis, there are qualities that we would like to see in the stock. Each symbol has its own personality so we don't treat every breakout with the same level of conviction. Most of these qualities are easy to spot on a longer-term chart. In time, you will be able to recognize them in seconds. The goal is to find stocks where we can predict price movement. Here are some of the qualities you should look for.

Orderly

We want to see many candles of a single color grouped together and minor retracement. In the case of a stock that is moving higher, we want tiny dips (if any) when the market drops. That tells us that buyers are aggressive. Any market related selling or profit taking is instantly gobbled up and the declines never gain traction. These nice tight patterns are conveying this. We do not want large mixed candles or long tails/wicks. These are a sign of volatility and uncertainty. We also don't want overnight gaps in opposite directions. Here is an exercise you should perform for each trade to determine if the price action is orderly. If you don't feel that you can predict the next move... keep looking.



There is a gun pointed at your head. You can pick either stock, but you have to guess the next move correctly. Which stock are you going to pick?

Trending

We want stocks that trend well. We do not want stocks that are choppy and that are trapped in a horizontal trading range. Once the trend starts, we want to see historical evidence that it is likely to continue. The stock has a pattern of nice ebbs and flows. It is likely to continue the trend and we can predict where the stock is likely to go. Stocks can change their character over time, but that transition is gradual. Stocks that were in a compression breakout and they start to trend nicely. Perhaps there was material news that impacted the company and now institutions are interested. This price movement could also be attributed to sector rotation and groups can get "hot" or "cold." Stocks that have been trending well in both directions can also settle

down into a horizontal range. When you flip stock charts for a few years, this visual pattern recognition will happen in seconds and it will become automatic. You will instantly separate out the stocks that deserve a close look from those that should be avoided. In the charts below you can see a stock that is trending nicely and another that is choppy and trapped in a horizontal range.



We can predict what the stock on the left is going to do with greater odds than the stock on the right.

Big Volume

When the volume is heavier than normal we know that institutions are trading the stock. That volume confirms that the current move is likely to continue when we see candles of a single color and a nice trend. In the chart above you can see how the stock on the left has nice volume off of support. We also see “stacked” consecutive green candles on heavy volume. You will also notice that the most recent price action for the stock on the left features mixed overlapping candles with wicks and tails on light volume. That tells us that the trend is starting to weaken and that we need to be careful. The chart on the right has periods of heavy volume, but it is all over the board within the range. Volume alone is not enough, we need to have a trend.

Monster Moves

For some reason the old adage “buy low and sell high” is translated by novice traders to mean “buy stocks that are tanking.” Big steep drops are a sign that the stock is in trouble. Institutions are hitting every bid (selling) and the stock is also being shorted. Material news has been released and it will impact future earnings. These stocks will have short covering bounces along the way. Bearish speculators will take gains and that will put upward pressure on the price. When they cover, bullish speculators will jump in thinking this is the “bottom” and they are getting a great “bargain.” Don’t be a “bottom picker” when you see stacked red candles on heavy volume. These stocks need to form a base over many months and the tiny bounces are

often bear flags that lead to the next leg lower. You should be more inclined to short these wimpy bounces than you are to buy them. The same concept is true for parabolic rallies on “stacked” green candles with heavy volume. When you see these types of moves on a chart you should be more inclined to join those moves than to fade them. The “big money” is fueling that move and our goal is to follow them. Alternatively, if you see these types of moves and they make you uncomfortable, keep flipping. There are thousands of stocks and you are bound to find some that you like.



Large gaps on heavy volume followed by stacked candles that agree with the gap are signs that the move will continue.

Room to Move

We have to be careful trading stocks at the extremes of the range. The temptation is to always expect breakouts, but typically those extremes will be tough to break through. In the case of a breakout to a new high, we need to do that quickly and on very heavy volume. The stock needs “escape velocity” from that resistance and we need to know that institutions are still buying it aggressively. That follow through is critically important and we do not see it that often. The issue with breakouts is that we do not know how strong that follow through is going to be or how far the stock might run. If we buy these breakouts we are constantly monitoring the price action and gauging strength. For this reason, trading breakouts and breakdowns in the middle of the stock’s long term range are more predictable. We have previous price levels that we can use to determine how much “room” the stock has until it reaches its next support/resistance level. Because the stock has already “been there,” it is plausible that it can get to that price point again.





In the chart you can see that AAPL is trending nicely. Once it starts a trend, it tends to continue. You will also notice that breakouts and breakdowns in the middle of the chart are fairly reliable and we can see that the move has room.

Exhaustion

When you are flipping charts and you notice that a stock has rallied to horizontal resistance it is important to look for the starting point. How far did the stock have to travel to reach that level? Stocks that have made big moves will run out of steam at those extremes. There will be instances where they blow through that resistance level with long green candles on heavy volume, but that is not typical. After a big move it is normal for the stock to spend time at that level because there will be some profit taking. If the stock is able to stay fairly tight to that resistance level it is a sign that the recent gains are being digested. Buyers are still supporting the stock and the bid is strengthening. Buyers are hoping to enter at a lower price, but the stock does not retrace very much. In time, buyers will get more aggressive and the stock will move through that resistance level. In the chart below you can see how AAPL traveled a long way from the low and it rested at horizontal resistance. When you are flipping charts you would recognize that exhaustion is likely and that it will take time for the stock to gather enough strength to get through that price point. Set alerts at the high and wait for the next breakout. AAPL paused for a month, buyers got more aggressive and the stock was no longer over-extended. This breakout had a chance to "go." The same concept applies to shorts. If the stock

had to travel a long distance to get to support, it is likely to spend some time near that level. The bounces will be brief and shallow and the stock will stay tight to that support. In time, sellers will get more aggressive and the stock will break that support. It is critically important that these breaches have follow through on good volume.



AAPL had traveled a long way to get to horizontal resistance. It was unlikely that the stock would breakout on the first attempt. It had to digest gains and eventually the stock was able to breakout. During this pause, you want the stock to stay tight to resistance (no big drops).

News/Earnings

Big news events will cause a big gap in the stock price on heavy volume. On our charts, earnings releases are noted with a “B” if the release was before the open and an “A” if the release was after the close. These announcements will often result in a gap up or a gap down. The bigger the gap, the bigger the shock. If the news resulted in a breakout through trendlines, horizontal support/resistance or major moving averages, the move is likely to continue in that direction. Investors were not expecting this news. They quickly adjust forecasts and they trade based on how future earnings will be impacted. In general, you want to follow moves

on heavy volume that produce long-term technical breaches. These tend to have sustained directional movement. You want to look for situations where the stock has “room” to the next support/resistance level. In the chart below the stock had a big gap down on earnings. In the first instance, the gap down did have follow through, but the bullish hammer was a warning sign to take gains. In the second instance, the stock did not bounce and the selling pressure remained heavy. Earnings announcements are important snapshots on the company’s fundamental performance during the last quarter. This information will have a lingering effect on the price of the stock for many weeks and we generally want to trade in the direction of these “oversized” moves. If the stock did not have much of an earnings reaction (no giant gaps or breaches) or if the initial reaction was instantly reversed, the earnings will not play as big of a role in the future price action of the stock.



Big gaps on news that breach major long-term technical levels on heavy volume tend to produce sustained directional moves.

Sector Rotation

Often Asset Managers will sell stocks in one sector and use the proceeds to buy stocks in another sector. We

refer to this as rotation. You do not have to know the company intimately, but you should know the basics of what they do and which sectors and groups they belong to. When you are flipping charts you will often see many symbols that belong to a sector (energy, financials, healthcare...). The rotation could even be related to the international market where they are listed like China. If you see a big move in a stock, read the stock description and get a basic understanding of the business they are in. Also note the group or sector they belong to. Some sectors will lay dormant for long periods of time with little to no action. All of a sudden, they will spring to life. This was the case with SCHW. It is normally a boring financial stock that makes small moves. Recently it took a nose dive along with other financial stocks when a major US regional bank failed. This should have prompted you to investigate.



When you see big moves through technical levels on heavy volume, identify the group and sector that the stock belongs to. It might be an isolated event for the company or it could be a macro change for the entire group or sector.

Volatility

Every company is different and we covered this in the fundamentals section. The consistency of profits and revenues is typically reflected in the price movement of the stock. Start-ups have incredible potential, but they are relatively risky. They might be vulnerable to competition, they might have a high cash burn rate or the product might still be in its infancy. These stocks can make huge swings and you will notice long mixed candles in the chart. When you structure a trade, you have to expect big moves that could work for you or against you. A large flour producer that has been around for decades has a very boring product line, but the profits are consistent. It does not have the upside potential that the start-up has and the price action will reflect that. These stocks do not make big moves. The 20-day average true range (ATR) measures how far you can expect the stock to move in a given day. When you are trading volatile stocks that move 4% or more in a day, they are very news sensitive and they are more sensitive to market moves. If you see stacked green candles on heavy volume, this could be a major development for the company. It could even prompt you to "buy stupid." A biotech that just had positive clinical trial results could run far because this drug could have a gigantic impact on earnings if it gets FDA approval. It will be difficult for analysts to gauge the potential and the models will differ. That gives this stock room to run. If you see a couple of stacked green candles in General Mills (GIS) on good volume, you should question the move since it is out of character (the stock does not make big moves) and you should find the headline. The point I am trying to make is to know the personality of the stock. Some stocks move like the wind and your factor that into your trading. Some stocks are very consistent and they do not move much so you treat them differently. One stock might be fine to chase and the other you would not.

Penny Stocks

Avoid stocks that trade under \$5. They do not have institutional interest and the price movement is often manipulated by market makers. Remember, we want to follow the "smart money" and they are not trading these stocks. The same is true of stocks that trade less than 1 million shares per day on average. Institutions are not going to be active because they can't get enough size off to make it worthwhile. These light volume stocks also tend to have very choppy and unpredictable price action.

Mega Cap Stocks

The top 100 companies in the S&P 500 are the biggest companies in the world. AAPL, GOOG, META, AMZN, NVDA and MSFT account for more than one fifth of the index. These are giant battleships. The stock bid/ask is tight and the options markets are often pennies wide. These stocks can trend nicely, but it is rare for them to make massive, sustained moves in a short period of time. They are scrutinized by every analyst on "The Street" and it is rare for them to surprise investors. When these stocks breakout, don't worry that you will never have another chance to buy them. Large institutions are in and out of these stocks regularly (buy and sell programs) and you will be able to buy dips. By the same token, if one of these giants goes on a tear, be ready to take gains on longs. You will have an opportunity to re-enter on a dip. Mega cap stocks are referred to as being "thick." That means there are always large buyers and sellers. These companies are well-established and there is nothing in their business model that will change dramatically. In the chart below, AAPL had a bull flag breakout D1. Some traders will hyperventilate and chase it higher, but not you. You recognize that this is a mega cap stock and that the volume is fairly light. You will have plenty of chances to

buy dips, take gains and reload.



AAPL has been in a nice upward trend and it has a nice bull flag. Even then, you did not have to chase this technical breakout. There were plenty of opportunities to buy dips.

The point of this article was to point out general characteristics that you should look for in a stock. Before a trendline is drawn or technical indicator is considered, we are getting a feel for the stock. Does it trend well? Is the price action fairly dependable? Has it make a huge run recently? Is it volatile or stable? Has it had any massive moves recently? This skill is not particularly hard to develop once you know what to look for. Use this as your guide. The more charts you flip, the better you will get at identifying these characteristics. In time, this evaluation will become automatic and you won't even realize you are doing it.

Chapter 4: The Basics For Designing Stock Searches

Learning how to construct stocks searches requires knowledge and experimentation. Here are some tips to help you get started.

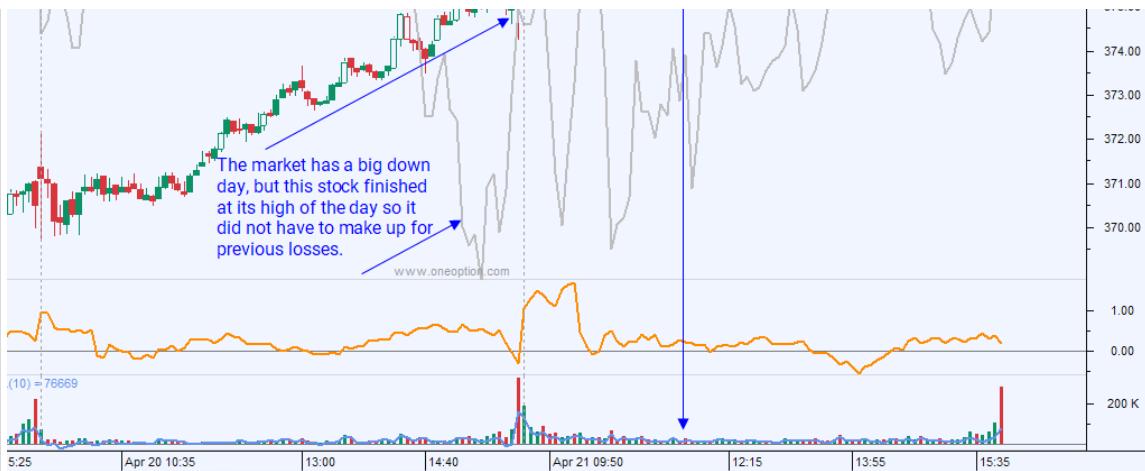
Let's start with the obvious. Before you search for stocks, you have to know what you are looking for. In the last 2 articles you learned the stock personalities and the technical characteristics we desire. This knowledge

is critically important because we rely heavily on visual confirmation. When you are flipping through the search results you need to recognize the best prospects instantly. When you construct your own searches, your goal is to capture as many of these great looking stocks as possible and to eliminate the worst prospects. You don't want to miss the best ones or waste time flipping through marginal charts.

Cast a wide net and then draw it in. There is a fine balance between being too open with your searches and too restrictive. If you are too open you will waste time flipping charts and you will get frustrated by the amount of time it takes to find the best prospects. When you are too restrictive with your search variables you will miss some of the best prospects because they did not meet one or two of the criteria. For this reason, it is best to identify a few variables that are the most important to you. I do suggest having relative strength and volume in most of the searches you construct. Run the search and if you have more than 40 results, add the next variable. With each checkbox you mark, more candidates will be eliminated and the quality of the remaining candidates will increase. I find that a list of 15 - 20 candidates is optimal. When I reach that stage I swap a variable out for another one to see if new prospects appear. You might consider creating a search that uses a powerful core of variables. Then add variables to create alternative versions.

The market impacts your searches. In the back of your mind you should know what the market has been doing for the last few weeks and the last few days. Know how will the market action impact the searches you are constructing and running. If the market has been in longer term up trend, but the last 3 days have been soft, your bullish search results will not yield as many candidates. Your “bread and butter” bullish searches that you have constructed might be too restrictive given the current market conditions. That means you have to loosen your search criteria. If the SPY was down huge the day before and it is down again today, a very basic bullish search might do the job. For instance, “Show me a stock that is above the prior day’s high, has great option liquidity and that has better than average volume today.” Why is this a great search? In order for the stock to have a shot at the prior day’s high, it probably did not get badly beaten down during the market sell-off. It had relative strength and it stayed within striking distance of that high. Today the stock is above that high when the market is down (relative strength) and it has good volume. Your other bullish searches might only return a few good prospects, but this search will leave the door open for other strong stocks that might have otherwise been filtered out.



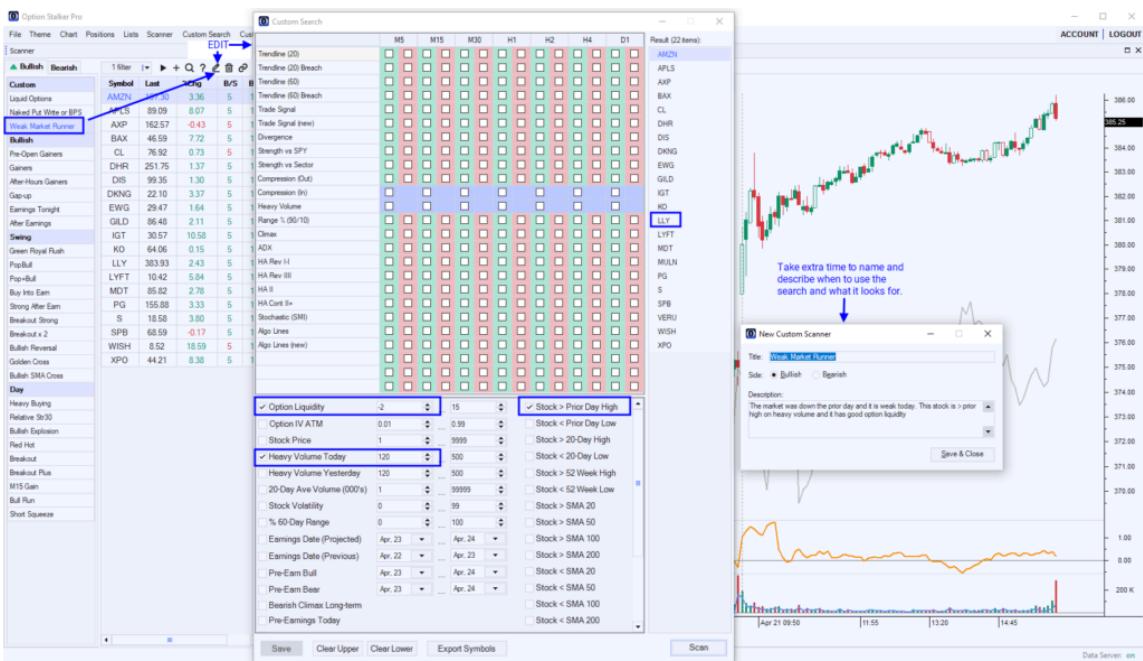


Sometimes very basic searches can yield incredible prospects. In your mind think about what might define a strong stock and then try those variables.

Contra searches can be equally effective. Once you construct a bullish search that produces great results, you can reverse the binary variables so that you can have a bearish contra version of the search. Normally, both versions will yield a fairly balanced number of candidates. When one search has many results and the contra version has very few results, the message is clear. Favor the side with the most results because the market is trending in that direction. This is also a time to adjust the searches. The side with the least results can be loosened by removing checkboxes and the side with many search results can be tightened by adding variables. In a raging bull market you can be very selective and your bullish searches can have many variables marked. When you are flipping through your bullish searches keep in mind what the market has been doing. If it has been flat for the last three days, look for stocks with nice green candles during that stretch. in an instant you should recognize those as decent prospects. In this scenario, it is going to be tough to find good bearish candidates. That means you need to remove some of those search variables. When you find a great mix of variables the contra searches are very effective because you know what makes that search “tick”. Typically, you will have good prospects on both sides without having to do a lot of adjusting.

The time frames for the variables should match the intended trade duration. Our edge is trading relative strength. If a stock is strong vs SPY across all time frames, it is likely to be a great candidate. However, realize that the M5 and M15 time frames are short-term. If you are looking for great swing trades, M5 and M15 are not relevant and you are filtering out great prospects. Focus on longer time frames and use other variables with long-term time frames. Know that the shorter time frames are very sensitive and they change from bullish to bearish very quickly. If you are looking for bullish day trades you might only need D1 to be strong vs SPY (to insure some longer-term strength) and the rest of the variables could be short-term (Heavy Volume M15, RS M5, RS M15, > prior high, HA Continuation M5...). A swing search that looks for longer-term swing candidates for bullish put spreads uses longer time frames than a “lotto” search that might only need M5 and M15 time frames because you are looking for a prospect an hour before option expiration.

Take extra time to name and describe your searches. There will be unique market situations where special searches are useful. For instance, the market gaps up big to a resistance level and there is a chance for a bearish reversal right after the open. You don't know if the move is going to hold or reverse, but you know that our most profitable scenario is a reversal. Take a peek and see if there are any stocks that are below the prior low on heavy volume. If you get the reversal, those stocks are going to drop like a rock. They have already defied gravity when the market ran higher and that is a sign of heavy selling pressure. Create names for the searches that tell you when to use them and write detailed descriptions of what they look for and mention the variables used. If the searches need to be refined or renamed, use the edit feature. It will reveal all of the search variables that were used in the search.



The extra time you take to properly name and describe the search will pay off. Use the Edit link to refine it and update the description.

Always search for bullish and bearish stocks. Day traders always need to stay one step ahead. If the market has been range bound and a benign cycle is more than half over, you start running searches for the next cycle on the notion that it will produce. This will give you time to watch those stocks while the cycle completes. You can compare the stocks to the SPY during that time on a tick-for-tick basis. If the cycle completes without a market move and there are signs that a trend reversal is likely, you will be ready to start scaling in. You've had time to watch the stock and you can see that it is ready to move. This same concept is true for swing traders. We never know what the market is going to throw at us and in a raging bull market you might find some excellent shorts. Consider using these to hedge your primary positions. Seeing both sides of the market is important. It keeps your perspective.

balanced and it elevates your awareness.



When the market has reached a range extreme, start looking for prospects that have been moving contra to the market and prepare for a reversal.

Backward engineer a search. There will be times when you see a great stock that did not come up on our favorite searches or your searches. It has orderly price action, relative strength, technical breaches, good volume and all of the other characteristics we like. There is one missing component that is keeping it off of our searches. When this happens, start with the most basic variables and check to see if the symbol is in the search results. If it is, keep adding variables until you no longer see it. Try various combinations and see if you can construct a search where it appears with 10-15 other stocks. This process will help you to understand the other variables and you are likely to discover very effective combinations that you had not previously considered.

Our favorite searches are a starting point. They were never intended to be all inclusive. That is why I developed Custom Search. You have the power to develop searches that fit the patterns you like to trade and that are well-suited for special situations. Your searches will be superior to our searches for that reason. It's important for you to experiment with Custom Search. The combinations are endless

and you will construct a portfolio of searches tailor fit to your style.

In the next section I will go through each of the Custom Search variables so that you understand what they measure and how to use them. It is going to be a very long article. Once you fine tune Custom Search, you will be able to find exactly what you want.

Chapter 5: Custom Search Variables - Multi Time Frame

Search variables that can be defined as bullish or bearish appear in the upper section Custom Search. Here's an explanation of what they look for and when to use them.

In this section, we will look at some of the ways you can pinpoint the best stocks using our Custom Search variables. You should be familiar with the technical patterns we seek from the previous articles and now we will describe how each variable can help you to find them. Our search engine is incredibly powerful and you can combine the variables across multiple time frames for additional confirmation. Match the time frames to your intended trade duration. Users click the variable once for bullish, a second time for bearish and a third time to deselect it.



This is the top section of the Custom Search matrix and these are binary Yes/No (bullish/bearish) variables.

Relative Strength (Market)

Real Relative Strength/Weakness vs SPY measures how strong the stock is relative to the SPY. This indicator is our “edge” and that is why it is at the top of Custom Search. It subtracts the percentage gain for the stock from the percentage gain for the SPY. A positive number reflects relative strength and a negative number reflects relative weakness. Vincent Buzzese (aka HariSeldon) made a modification to our original calculation and we have adopted it. The result is adjusted to account for normal volatility in the stock. A stock that has greater volatility relative to the SPY will move more and it will give the appearance of greater relative strength. We want to factor that out to get a true representation of relative strength.

Why is RRS/RRW so powerful? I hope by now you know the answer to this question. This is the ultimate “tell” that institutions are buying/selling the stock. At very minimum for all of your searches (day or swing), D1 should be marked. For bullish day trades we want to make sure that the stock has longer-term strength and when the stock has RRS on a D1 basis we have some reassurance that the stock has support in the form of institutional buying. RRS/RRW are even better when they are used across multiple time frames. If you are day trading a stock it must have RRS M5 if you are buying it. If we get the market wrong and the SPY declines, a stock with real relative strength will hold up much better than the market and other stocks. When the market rallies, a stock with RRS will lead the charge higher. There will be instances where the stock gaps up. It has run so far so fast that it can’t keep up that pace. RRS will start to decline, but that does not mean the stock is weak. As long as RRS is greater than zero, the stock is strong relative to the market. For large gaps up, an effective entry method is to wait for the stock to dip and for RRS to go below zero. I personally like stocks that are able to preserve the VWAP and the low of the day on that dip. Ideally, the dip does not retrace more than half of the gains from the open to the high of the day. Those are the strongest stocks. When RRS goes back above zero, it will provide a nice entry for your long. On very short-term time frames the stock can go from RRS to RRW. That is another reason to only trade stocks that have RRS on a D1 basis. We need to know that institutions have been buying that stock in recent days. The first chart below has a stock that is in a strong D1 up trend. It gaps higher overnight and it holds the open of the day. It recovers its strength and it adds to the gains. In the second chart below, the stock is weak on a D1 basis and sellers take advantage of the gap up. They crush the stock like a little bug and it never recovers. This is why we want a strong D1 chart.





This stock had a strong D1 chart. It gapped up, preserved the low, digested the gains and recovered its RRS. That provided a nice entry.



In this example, the stock has a nice gap up, but all of the RRS crosses above zero lost money. That is because the stock was horribly weak on a D1 basis and sellers pounded the gap up.

Another effective way to use the RRS/RRW indicator is to have it selected across multiple time frames for confirmation. This is the basis for the Green Royal Flush and Red Royal Flush searches. In the

example below, you can see how the D1 chart is attractive with the stock having multiple breakouts through resistance. As we look at all of the other time frames, we can also see the strength across all time frames. This stock has buyers and the dips are minor.



Relative Strength (Sector)

Here we are measuring the stock's real relative strength vs the sector that it belongs to. We use the 11 sector groupings for this calculation and it is in accordance with the Global Industry Classification Standard (GICS) which was developed in 1999 by MSCI and Standard & Poor's. The sectors are Energy (XLE), Utilities (XLU), Technology (XLK), Materials (XLB), Consumer Staples (XLP), Consumer Discretionary (XLY), Industrials (XLI), Communications (XLC), Healthcare (XLV), Financials (XLF) and Real Estate (XLRE). We use the ETF to measure the performance of the sector and even though the stock might not be a component in the actual ETF, this is a good benchmark for calculating RRS/RRW vs the sector. We perform the same calculation used for RRS/RRS vs SPY and we adjust for the volatility of the stock compared to the sector ETF.

Why is this so powerful? This is another level of confirmation. If the stock is strong relative to the market (SPY) and to the sector, institutions are buying it. In the previous article about the characteristics of a stock, I discussed some of the limitations of sector strength. Not all companies can be compartmentalized so the sector "fit" is often far from perfect.

Trade Signal

Developing accurate trade signals has been one of my greatest challenges. The development, testing and refinement process has taken more than a decade. The trade signals are proprietary and you can only get them here.

Trade signals can become the cornerstone to your directional bias once trust is established. That takes time and you need proof that they work under all trading conditions.

Traditional indicators used in the industry lag price movement. Consequently, these indicators are late and useless. By the time the indicator triggers a signal, the move is over.

Trade signals need to be timely. We have devised many ways to measure price action and they help us predict price movement. Any one can make this claim, but our 1OP Indicator has proven itself for many years. Our bullish and bearish crosses occur well before the inflection point and we see that on a daily basis. We've incorporated components of 1OP into our trade signals. This is critically important because we want to catch trend reversals as early as possible.

When you try our trade signals, you will notice that the entry is excellent. That instant cushion allows you to place your stop at your entry price giving you limited downside risk and plenty of upside potential.

Accurate trade signals also help you manage the trade. Our trade signals are sensitive. If the stock is not performing, an exit signal will trigger and you will be able to minimize losses.

Most traders exit trades too early and they cut their profits short. If an exit signal has not been triggered, keep riding the move until you have one. The fear of giving profits back scares many traders and they panic out on the first red candle. Knowing that the trade signals are sensitive will give you the confidence you need to stay in the trade. The signals won't let your profits slip away.

Avoid stocks that are trapped in a horizontal trading range or that are compressing. This is true for any indicator or trade signal. Instead, look for stocks that are breaking out or that are trending.

It really doesn't matter what I say about our trade signals. I developed them so of course I think they are fantastic. Test them visually using the arrows on the charts. Ease in and gradually start trading them. In time you will trust them and I'm confident they will become a cornerstone for your trading.

Trade Signal (New)

The Trade Signal was triggered in the prior period or the one before that. This is useful if you are trying to catch a move that is just getting started.

Compression Breakout

This means that the stock was in a tight horizontal trading range and now it has broken out. A bullish Compression Out means the stock has broken through horizontal resistance and it is trading above that level. A bearish Compression Out means the stock has broken below the low end of the horizontal trading range. The longer and tighter the compression, the bigger and more sustained the release. You can see compressions on the chart by using 10Sqr. The yellow dots tell you the stock is compressing, the red and green dots mean the stock made a big move out of the compression and the gray dots mean the stock is not compressing (normal volatility). Stocks that are compressing have been dormant and they are like coiled springs. The beauty of trading compressions is that option premiums are fairly cheap because the stock has been “dead wood.” You also don’t have to worry that the move is over-extended. On the breakout, it is just getting started so there is room to run. The biggest danger is that the breakout does not gain traction and that the stock gets sucked back into the range. That is why we need heavy volume breakouts with a long candle or a gap out of the range. The “escape velocity” is critical and we want immediate follow through. What ever the news is, it has thrown the stock out of equilibrium and there will be a price discovery process. If the move is higher, shorts will cover and longs will buy more.

Compression Breakout (New)

This search variable means that the stock was in a compression and that it broke out of the range the previous period or the one before that. We want to catch these breakouts early, so this is a great variable to use for your searches.



Compressions are like coiled springs. We need big moves out of the range on heavy volume or risk

falling back into the range.

Key Bar

We've previously discussed Key Bars in the Market section of this course. When a green candle has a larger than average range, the volume is greater than average and the candle closes near its high, it is relevant. That is a sign of aggressive buying and these candles often lead to follow through buying. If this search variable is bullish, the prior bar or the one before that was a green Key Bar. If this variable is bearish, the prior bar or the one before that was a red Key Bar. This is another variable we can use for confirmation. Sometimes, the Key Bar will be at the beginning of the move and it can signal a reversal and sometimes it can be in the middle of the range signaling continuation.



3/8 Crossover

This is a very basic technical pattern used by many traders. When the 3 period exponential moving average (EMA) crosses above the 8 period EMA, a buy signal is generated. When the 3 period EMA crosses below the 8 period EMA, a sell signal is generated. This signal can be used to pinpoint entries and exits. For instance, if you found an excellent stock with a strong D1 chart, you might wait for the EMA 3 to cross over the EMA 8 before you enter the trade. You would stay in the trade until the EMA 3 crosses back below the EMA 8. If the stock is trapped in a range or if the trend is not strong, this method will produce many false entries and exits. The slippage (cost of entering and exiting the trade) adds up quickly and you are forced to navigate bid/ask

spreads and commissions. The 3/8 cross overs are too sensitive for my personal taste, but many traders rely on them so we included them in our search variables.



Range % (90/10)

This variable compares where the last price is relative to the range of the current bar for that time frame. This is less relevant for an M5 bar because of the short time frame. It is more useful for longer time frames like H1. If you wanted to look for stocks that are above the 90% of the H1 bar, you would select the bullish version of this variable. Let's suppose the market had been selling off during the last hour, you might want to see which stocks are trading near the high end of the range. That would be another way of finding relative strength. If you wanted to find stocks that are trading in the lower 10% of the H1 range you would select the bearish version of the variable. These stocks have been in a steady decline and they are leading the move lower.

ADX

This is the Average Directional Index (ADX) developed by Welles Wilder. It is very commonly used and it measures trend strength.

Directional movement is **positive** (plus) when the current high minus the prior high is greater than the prior low minus the current low. This is called Plus Directional Movement (+DM). A negative value would simply

be entered as zero.

Directional movement is **negative** (minus) when the prior low minus the current low is greater than the current high minus the prior high. This is called Minus Directional Movement (-DM). A negative value would simply be entered as zero.

Let's keep this simple. For those of you who really want to dive into the calculations, you can search for ADX and find a wealth of information about it. We are comparing the high from the current candle to the high from the previous candle and the low from the current candle to the low from the previous candle. If the highs overpower the lows, it is a +DI. If the lows overpower the highs it is a -DI. These values are averaged (smoothed). When the +DI is rising and the minus -DI is falling, the spread between the two values (ADX) is increasing and the stock is in an up trend. When the -DI is rising and the +DI is falling, the spread between them is increasing and that indicates that the stock is in a down trend. Typically, an ADX value greater than 25 signifies that the stock is in a strong directional trend. Since we are momentum traders, this is a very powerful way to measure trend strength. Because there is a value, we can also quantify it and search for it.

There are a couple of drawbacks to using ADX. One is that it tends to be very late. Often by the time it gets to a value of 25, the trend is exhausted. After a long trend that suddenly reverses, it also takes a fair amount of time for the ADX value to start rising again. You can see this in the chart below. Off of the low for the stock, the +DI and the -DI start to converge. Eventually they cross, but it takes time for the +DI to rise well above the -DI. ADX is just starting to gain traction when the stock bounce is starting to crest. For this reason, ADX is a great confirming indicator much like the buy and sell signals.

There are many ways to use ADX as a search variable. From a swing standpoint, we want stocks that are in a strong trend. A stock that is in a strong uptrend with relative strength and that has a breakout on heavy volume is likely to continue higher. On a very short term basis, we can use Heavy Volume Today, relative strength, greater than prior day's high and bullish ADX M5 to find great call "lottos" in the last trading hour of the week. These stocks will have great momentum, and it has a good chance to push through the strike price just before expiration.





Average Directional Index is used to measure trend strength and a value > 25 is considered strong.

1OP Divergence

This variable is based on the 1OP indicator. When a stock rises during a bullish 1OP cycle, it is in a normal pattern. When a stock declines during a bearish 1OP cycle it is in a normal pattern. This indicator does not always correlate with the underlying stock and these divergences are a sign of trend strength. If a stock is stacking green candles on heavy volume and 1OP is preparing for a bearish cross, wait and see what that bearish cycle produces. If the stock continues to grind higher as 1OP falls, it is confirmation that there is more upside and that a bullish divergence is underway. If the stock has been stacking red candles on heavy volume and a bullish cross is pending, wait to see if that bullish cross produces a bounce in the stock. If it does bounce, you will have a better entry point for your short. If the stock can't get off the deck during the bullish cycle and it continues to drift lower, a bearish divergence is underway and the stock has more downside. That means the next bearish cross will be good. The key for using this indicator in this fashion is that the stock has movement on heavy volume. Without those two key ingredients, the divergences are much less meaningful. That is why I suggest using this in conjunction with other variables like RRV, Key Bars, RRS/RRW, SMI and LRSI. We need to make sure that the stock has many of the other characteristics we look for. 1OP has been optimized for day trading, so we would suggest only using it for short term intraday time frames (M5-M30).





The 1OP divergences are a sign of a strong trend and the next cross that agrees with the trend will produce a good move.

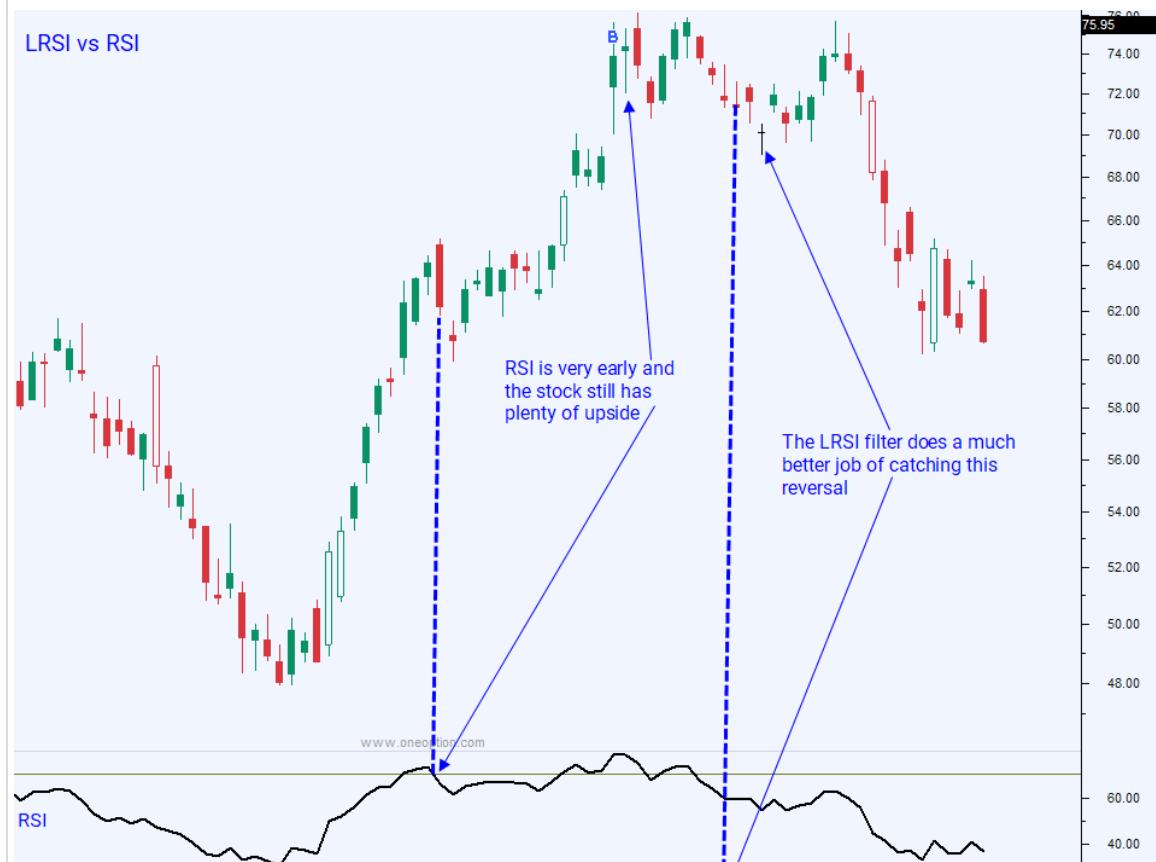
The variables in the upper portion of Custom Search are binary (bullish/bearish or yes/no) and the matrix gives us the flexibility to combine variables and to match time frames to our trade duration. Each variable has unique characteristics and if you learn how each of them work, you can find any stock. Hopefully, this article provided you with that information. When you find the “perfect” chart, start creating Custom Searches to see which variables pinpointed the stock. This exercise will help you to understand when to use certain variables and which ones work consistently for the pattern you seek. The combinations are almost limitless and you can share your favorite searches with other members in the chat room. In the next article, we will unlock the power of the variables you can select in the lower portion of Custom Search.

RSI

Laguerre Relative Strength Index (LRSI) is a filter that was added by John Ehlers to the Relative Strength Index, which was created by Welles Wilder. Before we get started on this topic, RSI is not the edge we trade and it should not be confused with RS/RW. RSI measures the stock's performance relative to its own previous

price movement (against itself). RS/RW measures the stock's performance relative to the S&P 500. These are two VERY different concepts and it is critically important that you do not confuse them.

The Relative Strength Index (RSI) measures the rate of change of the underlying stock. After a big move higher, the stock will not be able to maintain the same level of speed and at some point it will decelerate or pause. RSI produces a sell signal when the rate of change slows and it would consider the stock "overbought." The problem with this indicator is that strong stocks could still have plenty of upside momentum. RSI is often too early and it generates false signals (losses when the position is stopped out). The LRSI filter adds a lagging component that greatly reduces the false signals and when the price action has confirmed sufficiently, it quickly generates a signal. The LRSI standard default is .5 gamma. When the indicator is below 20 and it rises above 20 a buy signal is generated. It remains on that buy signal until it rises above 80. When the indicator falls below 80, a sell signal is generated and it stays on that signal until it falls below 20. Then the cycle starts over. The indicator is "sticky" and when it is above 80, it will stay there for a long period of time. If you have a tendency to exit trades too early, LRSI will help you stick with the position. If you are long and it is above 80, ride that trade. If it is below 20 and you are short, ride that trade. LRSI is excellent at picking reversals and it is good for confirming the move as well. The search is based on the default value (.5 gamma) and we also use the 80/20 parameters for bullish/bearish. Typically, when the indicator crosses below 80, it will promptly go below 20. I like to have that confirmation within 5-6 periods because it signals good downward momentum. The same is true when the indicator rises above 20. We want to see it cross above 80 fairly quickly. If you are adding the indicator to a chart, you might consider increasing the gamma to .70. I prefer this setting. I find that the initial entry might be delayed by a few bars, but once LRSI settles above 80 (or below 20), it tends to stay there and you are not prematurely head faked out of positions.





LRSI has a lag component that eliminates many of the head fakes common to RSI. Once the signal is generated, it moves quickly from one extreme to the other and that makes it “sticky” once it reaches an extreme. Stick with shorts if it is under 20 and ride longs if it is > 80.

LRSI (New)

This Custom Search variable allows us to catch a reversal early. The first condition is that LRSI has been below 20. In the previous period or the one before that, it closed above 20. This would be a bullish signal. Conversely, LRSI has been above 80. In the previous period or the one before that, it closed below 80. That would be a bearish signal. Since the signal is early, it is important to use other indicators that might also confirm the move. They could be trendline breaches, bounces off of major moving averages or an SMI bullish cross (chart below).





If you are trading a bullish reversal, make sure that you are not “picking bottoms” and trading against a very strong down trend. Stocks that have been in a range and that have significant horizontal support are fine. Pullbacks in the middle of the range that find support and then have a bullish LRSI (new) cross are also fine. The signal is in the early stages and that poses greater risk and reward. A bullish cross in a strong downtrend could quickly reverse forming a bearish flag.



SMI

The Stochastic Momentum Index (SMI) measures momentum, but in a different way. A stock that is in an upward trend will produce bars where the close is above the mid-point of the range for that bar and that finishes in the upper end of the range for the bar. A stock that is in a down trend will produce bars where the close is below the midpoint of the bar and close to the low end of the range for the bar. If we think about the price action we want on the long side, we look for stacked consecutive green candles closing on their high. When that trend is exhausted, the bodies of the candles will compress and the difference between the mid-point of the range and the close will decrease. At the high end of the range, we will also see wicks and the

stock closes well off of the high for that bar. Mixed overlapping candles will also be a sign that the trend is weakening. The SMI value will decrease because the indicator measures the close relative to the range for each bar. When the fast line of the indicator passes below the slow line of the indicator, a sell signal is generated. When the fast line of the indicator passes above the slow line, a buy signal is generated. This is one of my favorite indicators because it tends to identify trend changes early. Unlike the Trade Signals and ADX, we can use SMI to identify trend reversals.

One of the draw backs for SMI is that it will generate many false signals when the stock is trapped in a range. This is also common for many other technical indicators. This is why it is important never to rely on one indicator alone. They all measure different aspects of price movement, and we need confirmation across multiple time frames using the same indicator and/or we need to use the indicator in conjunction with other indicators. Learn each of the indicators and then create powerful search combinations.



This indicator is excellent at spotting reversals but it will give false signals when the stock is compressing.

SMI is a great indicator to use for confirmation that a trend is under way. We want the price action that is consistent with what this indicator measures. We want stocks that are closing close to the high of the bar with little to no retracement. It can be used on any time frame or across multiple time frames. Here is an example of how you would use SMI in conjunction with 10Squeeze and trendline

breaches.



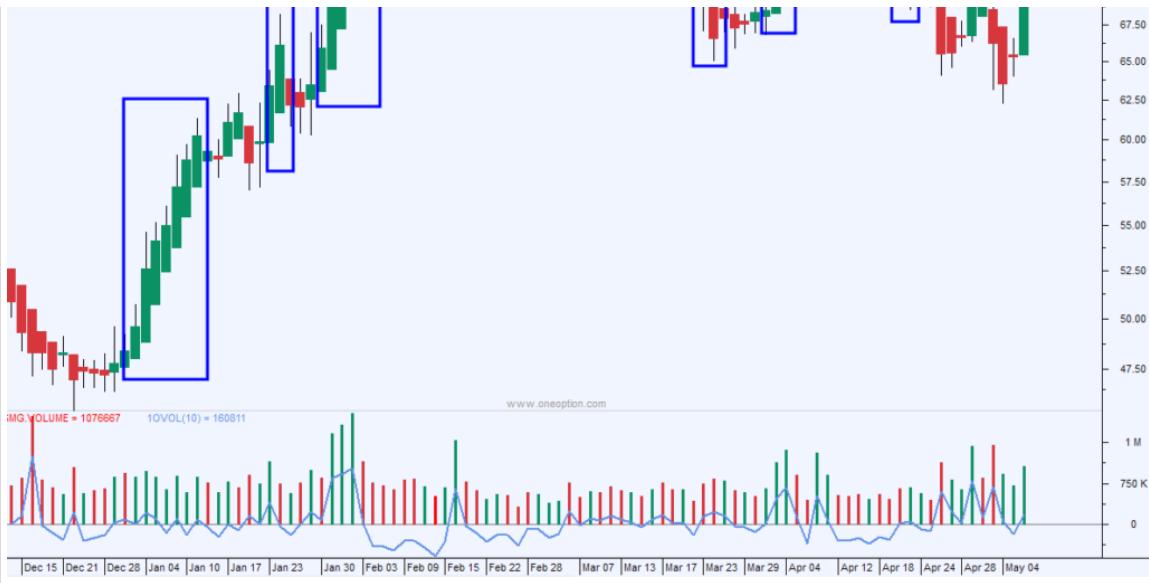
SMI (New)

If the SMI indicator had a bullish or a bearish cross in the last period or the one before that, it will appear in searches where SMI (new) is selected. This will allow us to catch the move when it is just starting. Know that risk and reward go hand in hand. Early signals could be more prone to reverse so make sure you are combining this variable with other indicators for multiple confirmation.

Heiken-Ashi (HA) Continuations

Here we are looking for two or more consecutive flat top red HA candles to confirm that a strong move lower is in place. Two or more consecutive flat bottom green HA candles would signify that a strong move higher is underway. The more consecutive candles we have of a single color, the stronger the trend. An exit strategy might be to wait for a doji (wick and tail) or to wait for a reversal candle.

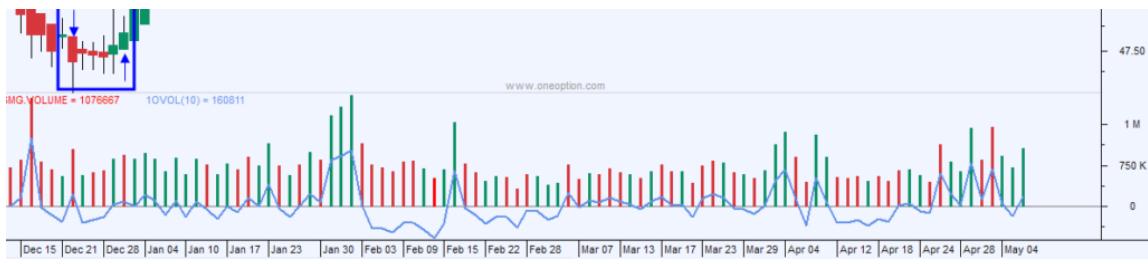




Heiken-Ashi (HA) Reversals

The HA plotting method helps us to identify trend reversals. The midpoint of the previous candle ($\text{high} - \text{low}/2$) is combined with the average price of the current candle ($\text{high} + \text{low} + \text{open} + \text{close}/4$) to create the Heikin Ashi candle. Because two candles are used to create the current candle, the values won't match those of a normal candlestick. The end result is a plot with nice orderly red and green candles that make it easy to visually confirm trends and reversals. The concept is fairly straight forward and I thank Dave Wyse for introducing this method to all of us. A flat top red candle is a sign of strong downward price movement and a flat bottom green candle is a sign of buying. For a bullish reversal, we will be looking for a flat red top candle followed by a flat green bottom candle. There can be candles between the two of them with wicks and tails or there may not be any candles between the flat top red and the flat bottom green candle. In the chart below, you can see the reversals. This method can produce reversals where you are stopped out and then you immediately re-enter the trade. It does a good job of staying on the right side of the trend. It is sensitive to price movement, but not as sensitive as a normal candlestick. Once the trend is underway, the candles of a single color start to stack and that gives traders the confidence to stick with the trade. This HA reversal variable should be used with other indicators.





High Relative Volume (RRV)

Real relative volume (RRV) measures the current volume relative to its 20-period average volume. Notice that I did not say 20-day average volume. If we were measuring the D1 volume, this would be correct. However, we can select any time frame we want in Custom Search. If we select M5 heavy volume, it will look at the most recent M5 bar. We calculate the 20-day average volume for that exact 5 minute interval for each trading day. This allows us to compare “apples with apples.” The average volume for the first 5 minutes of trading is going to be much higher than a 5 minute interval in the middle of the day. The ability to conduct these searches paves the way for the explosion alerts and we will discuss those in another article. A stock will typically have greater volume when the market has greater volume. so we adjust for that to get a true representation of the increase. This is another modification suggested by Vincent Bruzzese and we have adopted that method.

Why is RRV so important? Volume legitimizes price movement. Heavy volume is generated by large institutional traders and it validates the move. Remember, our goal is to follow the “smart money.” If there is no volume, they are not active and we can’t trust the move. If we are day trading during a dull low volume market day, we need to find stocks that have heavy volume. We can use the Heavy Volume Today variable in the lower section of the table (adjustable parameters) and we will discuss that in another article. We can also search for stocks that have had heavy intraday volume. We can use H1, M30, M15 or M5 time frames for this and you should consider including this variable in all of your short-term searches. If the market is not providing any tailwind, the stock will have to do all of the heavy lifting. Only stocks that have RRV that is above average will have the power to make sustained moves.

In Compression

This variable appears at the bottom of the upper section because it is not bullish or bearish, the stock is in a compression. We talked about the power of compressions in the Market section. When the stock is trapped in a range buyers and sellers are in agreement and the stock is in equilibrium. The volatility collapses and traders wait for any material news that might change the outlook for the company. Until the stock is above the high end of the compression range or below the low end of the compression range, there is no need to trade it. We are directional traders and we want movement.

Why is this variable important? There are a few reasons to search for stocks that are in a compression. If the market has been selling off hard on a D1 basis, a compression tells us that the stock has relative strength. It is not selling off with the market. At very least, it means that the stock has big buyers who are scooping up

shares while the market is selling off. It could be a great candidate for a bullish put spread. We can also search for compressions and then place a horizontal alert above the high from the compression and another below the low of the compression. When there is a breakout, we will know that a sustained directional move could be starting. As with any breakout, we want it to happen on heavy volume and a long candle. This variable is neither bullish or bearish.

Chapter 6: Custom Search Variables - Event

This is a description of the variables you will find in the lower section of Custom Search and how to use them.

The lower section of Custom Search has a different set of powerful variables that can be used in concert with the variables in the upper section. In this article I will describe each of them and their relevance when searching for the strongest and weakest stocks.

Stock Profile

These general stock characteristics are used to filter out stocks that do not fit the profile you are looking for. Here is a description of each field.

Stock Profile					
<input type="checkbox"/> Price	1	↔	10000	↔	<input type="checkbox"/> Option IV (ATM) 0.01 ↔ 1.00
<input type="checkbox"/> Avg Volume (20-Day) (000s)	1	↔	100000000	↔	<input type="checkbox"/> Weekly Options
<input type="checkbox"/> ATR (as %)	0	↔	100	↔	<input type="checkbox"/> IV Spike
<input type="checkbox"/> Option Liquidity Rating	-10	↔	15	↔	<input type="checkbox"/> Only ETFs
					<input type="checkbox"/> No ETFs
Action Today					
<input type="checkbox"/> Volume (000s)	1	↔	100000000	↔	<input type="checkbox"/> SMA Cross
<input type="checkbox"/> RVOL	1.00	↔	500.00	↔	<input type="checkbox"/> >/< VWAP (M5)
<input type="checkbox"/> Prior Day RVOL	1.00	↔	500.00	↔	<input type="checkbox"/> >/< Prior Day High/Low
<input type="checkbox"/> Volatility Today (% of ATR)	0	↔	100	↔	<input type="checkbox"/> New High/Low of Day
<input type="checkbox"/> % Today's Range	0	↔	100	↔	
Daily Range					
<input type="checkbox"/> % 60-Day Range	0	↔	100	↔	<input type="checkbox"/> Trendline Breakout
<input type="checkbox"/> >/< SMA 200					<input type="checkbox"/> >/< AVWAPE
<input type="checkbox"/> >/< SMA 100					<input type="checkbox"/> >/< AVWAPQ
<input type="checkbox"/> >/< SMA 50					<input type="checkbox"/> >/< 20-Day High/Low
<input type="checkbox"/> >/< SMA 20					<input type="checkbox"/> >/< 52 Week High/Low
Earnings					

<input type="checkbox"/> Pre-Earnings Bull/Bear	This week	<input type="checkbox"/> Pre-Earnings Today
<input type="checkbox"/> Projected Earnings	1 day	<input type="checkbox"/> Post-Earnings Today
<input type="checkbox"/> No Earnings Within	1 day	<input type="checkbox"/> Post-Earnings Bull/Bear
<input type="checkbox"/> Prior Earnings	1 day ago	
<input type="checkbox"/> No Prior Earnings	1 day ago	

Price

Some traders like to trade stocks that are less than \$10 and other traders like to trade stocks that are over \$30. What ever your preference, you can use this variable to define the price range for the stocks you are interested in.

Option IV(ATM)

Option implied volatilities (IVs) are calculated each day after the close. We take the front month regular expiration and we average the option IV for at the money calls and puts. Traders can set the lower and upper range. Traders who like to buy option premium will want to set the range between .01 and .35. These are considered to be relatively “cheap”. Traders who like to sell option premium should set the range from .35 to 1.00. These options will be relatively “expensive” and the trader will be able to distance themselves from the action by selling far out of the money options. The goal is to take advantage of time premium decay. I use this filter when I am looking for bullish put spreads and I set the value greater than .35. If the market is in a strong long-term up trend I will set this value at .01 to .35 and I will be looking to buy “cheap” calls with a delta of .7 or higher a few months out.

Average Volume

In general, I won’t even consider a stock where the 20-day average daily volume is less than a million shares. Liquidity is very important when you are trying to enter and exit the trade. Stocks that have low volume also tend to be choppy and they do not have the nice orderly price action I am looking for. The numbers are expressed in thousands so 1,000 = 1,000,000.

Weekly Options

Stocks that are active have weekly options and they tend to have liquid options markets. The bid/ask spread is tighter making it easier to enter and exit trades. If I am looking for earnings calendar spreads, the stock must have weekly options. If I am selling out of the money bullish put spreads, I want the flexibility to chose from various expiration dates and I will use this filter. Traders who are searching for “lotto” trades on Friday will also want to use this filter since they are trading options that will expire in a few hours.

ATR

Some traders favor volatile stocks while others avoid volatility. This variable calculates the 20-day ATR and it divides that by the price of the stock. That tells us the daily percentage move we can expect for the stock. A daily average range of 2.5% or less would be a stable stock. Stocks in the 2.5% to 3.5% would have normal volatility. Stocks in the 3.5% to 4.5% range would be considered volatile and stocks that are above 5% are considered very volatile.

IV Spike

Spikes in option implied volatility (IV) indicate uncertainty. Option IVs will spike when the stock makes a big move and we can see that move in the chart. When the stock has not moved much and the option IVs are spiking, it is a sign that news is pending. It could be clinical trial results for a new drug, litigation, a new product launch or an earnings release. Option IVs don't increase by mistake. Market Makers are very aware of these events and traders can avoid costly mistakes by using this filter. In general, avoid trading stocks with rising IVs. Chances are there is a binary event on the horizon and we don't know the outcome. We want to avoid situations where our odds are 50:50 because we can do much better than that trading stocks that have relative strength, technical breakouts, heavy volume and no news pending.

Option Liquidity Rating

We have a proprietary method for calculating option liquidity and it ranges from -10 to +15. The bid/ask spread, the daily option volume, open interest and the availability of weekly options are some of the variables we use. If the option liquidity rating is less than -4, it is considered poor and you should favor trading shares of stock. A rating from -3 to 0 is adequate and you should be able to execute 10- 20 contracts without an issue. You should try to "split" the bid/ask spread. A rating from 1 – 4 is excellent and you can trade larger size. Stocks with a rating above 5 have excellent option liquidity and you can trade 100 contracts without much if any market impact. In general, we want good option liquidity, but know that you will be eliminating many great prospects if you set this value above 5. There simply aren't that many stocks that have fantastic option liquidity.

Only ETFs

Some traders only want to trade ETFs and they should select this variable to filter out stocks.

No ETFs

Some traders don't want to trade ETFs and they want to focus on the strongest stocks. Often, contra ETFs will find their way into the searches and this filter will eliminate them. For instance, if I am looking for a strong stock when the market is down, I might have bearish contra ETFs included in the

list. They are moving higher because the market is down and by selecting this variable I can filter them out.

Action Today

This section focuses on the current day's price action and it is primarily used by day traders.

Stock Profile			
<input type="checkbox"/> Price	1	↔	10000
<input type="checkbox"/> Avg Volume (20-Day) (000s)	1	↔	100000000
<input type="checkbox"/> ATR (as %)	0	↔	100
<input type="checkbox"/> Option Liquidity Rating	-10	↔	15
<input type="checkbox"/> Option IV (ATM)	0.01	↔	1.00
<input type="checkbox"/> Weekly Options			
<input type="checkbox"/> IV Spike			
<input type="checkbox"/> Only ETFs			
<input type="checkbox"/> No ETFs			
Action Today			
<input type="checkbox"/> Volume (000s)	1	↔	100000000
<input type="checkbox"/> RVOL	1.00	↔	500.00
<input type="checkbox"/> Prior Day RVOL	1.00	↔	500.00
<input type="checkbox"/> Volatility Today (% of ATR)	0	↔	100
<input type="checkbox"/> % Today's Range	0	↔	100
<input type="checkbox"/> SMA Cross			
<input type="checkbox"/> >/< VWAP (M5)			
<input type="checkbox"/> >/< Prior Day High/Low			
<input type="checkbox"/> New High/Low of Day			
Daily Range			
<input type="checkbox"/> % 60-Day Range	0	↔	100
<input type="checkbox"/> >/< SMA 200			
<input type="checkbox"/> >/< SMA 100			
<input type="checkbox"/> >/< SMA 50			
<input type="checkbox"/> >/< SMA 20			
<input type="checkbox"/> Trendline Breakout			
<input type="checkbox"/> >/< AVWAPE			
<input type="checkbox"/> >/< AVWAPQ			
<input type="checkbox"/> >/< 20-Day High/Low			
<input type="checkbox"/> >/< 52 Week High/Low			
Earnings			
<input type="checkbox"/> Pre-Earnings Bull/Bear	This week	↔	
<input type="checkbox"/> Projected Earnings	1 day	↔	1 day
<input type="checkbox"/> No Earnings Within	1 day	↔	1 day
<input type="checkbox"/> Prior Earnings	1 day ago	↔	1 day ago
<input type="checkbox"/> No Prior Earnings	1 day ago	↔	1 day ago
<input type="checkbox"/> Pre-Earnings Today			
<input type="checkbox"/> Post-Earnings Today			
<input type="checkbox"/> Post-Earnings Bull/Bear			

Volume

Traders can set a minimum threshold for the volume today. This is slightly different from the volume filter using the 20-day average volume. There will be times when a stock is dormant and it has low volume. News hits and the volume spikes today. The 20-day average volume filter might eliminate the prospect, but this filter will allow it to pass through if it meets your minimum volume requirement.

SMA Cross

If you select this variable, the first click will default to bullish. We've combined all 3 of the major moving averages into one variable. The stock was below the 50-day, 100-day or 200-day MA yesterday and today it is above that moving average. If you click the variable a second time, it will shift to

bearish. The stock was above the 50-day, 100-day or 200-day MA yesterday and today it is below that moving average. If you click the variable a third time, the box will not be selected. Many of our variables have a bullish or bearish setting. When you click a variable and it is green (bullish), you know that if you click it again it will be red (bearish).

RVOL

This study takes the average 5 minute volume for each M5 increment and it averages that volume over a 20-day period. Then we add all of the M5 increments that have elapsed during the day to find the average volume to that point in the trading day and we compare it to the current volume. If the current volume is greater than the 20-day average volume for the elapsed time, the stock has greater than average relative volume. Users can increase or decrease this value. If you want to find a stock that has 200% of its normal average volume you can raise the value to 2.00. These stocks are sure to have news so make sure you check for it. Volume is a critical component. It tells us that institutions are active and that the move is legitimate and sustainable. This is an essential variable to use when the market is dull. The stock will have to do all of the heavy lifting and heavy volume indicates that institutions are active.

VWAP

If you multiply the price of every trade today by its volume and then divide that number by the total shares traded today, you get the volume weighted average price (VWAP). This is an important price point and it is used by institutions. Asset Managers will give orders to executing brokers like Citadel who will honor the VWAP for the fill price. In doing so, the Asset Manager does not have execution risk. Firms like Citadel have sophisticated algorithms and programs that help them execute these trades during the day. Many professional traders devise trading strategies around VWAP. In general, a stock that is above VWAP is considered to be bullish and a stock that is below VWAP is considered to be bearish. This variable allows us to search for these stocks. Click VWAP once and it will look for stocks that are above VWAP. Click VWAP twice and it will look for stocks that are below VWAP.

Prior Day RVOL

The stock's volume yesterday was greater than the 120% of the 20-day average volume. This is a nice variable because it tells us that the stock had active buyers/sellers the day before. This is even more powerful when the relative volume today is above average. Those same traders are back for more and the move has a higher likelihood of being legitimate.

Prior Day High/Low

This is one of my favorite variables. I rarely buy a stock that is not above the prior day's high. That is the first resistance level and if the stock can't even get above it, I have no interest in trading it.

Remember, we want stocks that have lots of room to run. Let's say that the market is in a nasty decline today. I will often run a search to find stocks that are above the prior day's high. This is such a simple and powerful search to run and it is a sign of true relative strength. On a day when most stocks are suffering from heavy losses, this stock is up on the day and it is above the prior day's high. When the market finds support, this stock is sure to run higher. It might take the market a few days to find support so set an alert at a nearby resistance level for the stock and you will know when it is staging the next leg higher.

Volatility Today

If a stock has greater than average volatility, it might have news that is driving the action. The normal 20-day ATR is 1.00. If you set the value to 1.50, the stock will have exceeded the normal daily range by 50%. If you combine this with RVOL, you have a stock that is making big moves on heavy volume.

New High/Low of Day

These stocks made a new high of the day or a new low of the day in the last 5 minutes and we can search for them. You can zero in on the strongest/weakest stocks very quickly. Imagine that the market has been strong during the day, but it just had a small retracement. When you look for a stock that is making a new high for the day it tells you this stock was oblivious to the market dip and that buyers are lined up. This is also a variable you can add to the custom column layouts. When you have many stocks in a search, this column will reveal the strongest stocks in a quick glance.

% Today's Range

This variable measures where the stock is relative to the range for the day. For instance, if you are looking for a stock that is near the high of the day, you would set a range of 90 to 100. That would mean that it is in the upper 10% of the range for the day. If you set a range of 1 to 10, the stock would be in the lower 10% of its daily range.

Daily Range

This section focuses on longer-term price levels. When we day trade, we want to make sure that the stock is in a longer-term up trend. We always want to day trade stocks that look good on a swing basis. Of course these variables are important to longer-term swing traders as well.

Stock Profile							
<input type="checkbox"/> Price	1	↔	10000	↔	<input type="checkbox"/> Option IV (ATM)	0.01	↔ 1.00
<input type="checkbox"/> Avg Volume (20-Day) (000s)	1	↔	100000000	↔	<input type="checkbox"/> Weekly Options		
<input type="checkbox"/> ATR (as %)	0	↔	100	↔	<input type="checkbox"/> IV Spike		

<input type="checkbox"/> Option Liquidity Rating	-10	↔	15	↔	<input type="checkbox"/> Only ETFs	
					<input type="checkbox"/> No ETFs	
Action Today						
<input type="checkbox"/> Volume (000s)	1	↔	100000000	↔	<input type="checkbox"/> SMA Cross	
<input type="checkbox"/> RVOL	1.00	↔	500.00	↔	<input type="checkbox"/> >/< VWAP (M5)	
<input type="checkbox"/> Prior Day RVOL	1.00	↔	500.00	↔	<input type="checkbox"/> >/< Prior Day High/Low	
<input type="checkbox"/> Volatility Today (% of ATR)	0	↔	100	↔	<input type="checkbox"/> New High/Low of Day	
<input type="checkbox"/> % Today's Range	0	↔	100	↔		
Daily Range						
<input type="checkbox"/> % 60-Day Range	0	↔	100	↔	<input type="checkbox"/> Trendline Breakout	
<input type="checkbox"/> >/< SMA 200					<input type="checkbox"/> >/< AVWAPE	
<input type="checkbox"/> >/< SMA 100					<input type="checkbox"/> >/< AVWAPQ	
<input type="checkbox"/> >/< SMA 50					<input type="checkbox"/> >/< 20-Day High/Low	
<input type="checkbox"/> >/< SMA 20					<input type="checkbox"/> >/< 52 Week High/Low	
Earnings						
<input type="checkbox"/> Pre-Earnings Bull/Bear	This week	▼			<input type="checkbox"/> Pre-Earnings Today	
<input type="checkbox"/> Projected Earnings	1 day	▼	↔	1 day	▼	<input type="checkbox"/> Post-Earnings Today
<input type="checkbox"/> No Earnings Within	1 day	▼	↔	1 day	▼	<input type="checkbox"/> Post-Earnings Bull/Bear
<input type="checkbox"/> Prior Earnings	1 day ago	▼	↔	1 day ago	▼	
<input type="checkbox"/> No Prior Earnings	1 day ago	▼	↔	1 day ago	▼	

% 60-day Range

This variable will help you find stocks that are at one of the extremes of the 60-day range. If you were looking for a strong stock, you would want to find stocks that are in the upper 25% of that range. If you were looking for a weak stock, you would want to find stocks that are in the lower 25% of the 60-day range.

Trendline Breakout

This search variable helps us find stocks that have breached an automated trendline in the last 10 days. A bullish breakout could be a High- trendline or a High+ trendline. A bearish breakdown could be a Low+ trendline or a Low- trendline. When viewing the search results we suggest adding 1OTL Now to your D1 charts so that you can see the breach. Click this variable once for a bullish breakout and twice for a bearish breakdown.

SMA 200

If you click this variable once, the stock will be above the 200-day SMA (bullish). If you click it twice, it would be bearish with the stock below the 200-day SMA.

AVWAPE

This variable is the volume weighted average price since the earnings release (AVWAPE). VWAP is

anchored to that date. After studying this concept for two years, I find this variable to be relevant. Imagine that you are a large Asset Manager. You liked the earnings release, but you know that entering a large position would impact the price. You hand the order off to a firm like Citadel and you provide them with a deadline to fill the order. Citadel will be closely monitoring the AVWAPE and they will try to fill the order at that price (or better). I view AVWAPE to be as significant as any of the major moving averages.

SMA 100

If you click this variable once, the stock will be above the 100-day SMA (bullish). If you click it twice, it would be bearish with the stock below the 100-day SMA.

AVWAPQ

This is the volume weighted average price since the start of the quarter (AVWAPQ). We use the day after triple witching (third Friday in March, June, September and December) to anchor this variable. Asset Managers are often “window dressing” their portfolios into the end of the quarter and this is when they are making allocation decisions. I find this variable to be particularly relevant for indices since they do not have earnings announcements and those futures contracts “roll over” on triple witching.

SMA 50

If you click this variable once, the stock will be above the 50-day SMA (bullish). If you click it twice, it would be bearish with the stock below the 50-day SMA.

20-day High/Low

This allows us to find stocks that are making a new 20-day High or a new 20-day Low.

SMA 20

If you click this variable once, the stock will be above the 20-day SMA. If you click it twice, it would be bearish with the stock below the 20-day SMA.

52-Week High/Low

This variable allows us to find stocks that are making a new 52-week High or a 52-week Low.

Earnings

We trade around earnings announcements and these variables are very important and powerful. We have tracked stocks for 3 years and we know which ones have statistically rallied into earnings and which ones tend to sell off. The earnings reactions can be bullish or bearish and often the stock does not show its true colors for a couple of weeks. We can structure our searches to find stocks that have been strong/weak after posting results. These searches can also be used to plan longer-term trades like bullish put spreads.

Stock Profile						
<input type="checkbox"/> Price	1	↔	10000	↔	<input type="checkbox"/> Option IV (ATM) 0.01 ↔ 1.00	
<input type="checkbox"/> Avg Volume (20-Day) (000s)	1	↔	100000000	↔	<input type="checkbox"/> Weekly Options	
<input type="checkbox"/> ATR (as %)	0	↔	100	↔	<input type="checkbox"/> IV Spike	
<input type="checkbox"/> Option Liquidity Rating	-10	↔	15	↔	<input type="checkbox"/> Only ETFs	
					<input type="checkbox"/> No ETFs	
Action Today						
<input type="checkbox"/> Volume (000s)	1	↔	100000000	↔	<input type="checkbox"/> SMA Cross	
<input type="checkbox"/> RVOL	1.00	↔	500.00	↔	<input type="checkbox"/> >/< VWAP (M5)	
<input type="checkbox"/> Prior Day RVOL	1.00	↔	500.00	↔	<input type="checkbox"/> >/< Prior Day High/Low	
<input type="checkbox"/> Volatility Today (% of ATR)	0	↔	100	↔	<input type="checkbox"/> New High/Low of Day	
<input type="checkbox"/> % Today's Range	0	↔	100	↔		
Daily Range						
<input type="checkbox"/> % 60-Day Range	0	↔	100	↔	<input type="checkbox"/> Trendline Breakout	
<input type="checkbox"/> >/< SMA 200					<input type="checkbox"/> >/< AVWAP	
<input type="checkbox"/> >/< SMA 100					<input type="checkbox"/> >/< AVWAPQ	
<input type="checkbox"/> >/< SMA 50					<input type="checkbox"/> >/< 20-Day High/Low	
<input type="checkbox"/> >/< SMA 20					<input type="checkbox"/> >/< 52 Week High/Low	
Earnings						
<input type="checkbox"/> Pre-Earnings Bull/Bear	This week	▼			<input type="checkbox"/> Pre-Earnings Today	
<input type="checkbox"/> Projected Earnings	1 day	▼	↔	1 day	▼	<input type="checkbox"/> Post-Earnings Today
<input type="checkbox"/> No Earnings Within	1 day	▼	↔	1 day	▼	<input type="checkbox"/> Post-Earnings Bull/Bear
<input type="checkbox"/> Prior Earnings	1 day ago	▼	↔	1 day ago	▼	
<input type="checkbox"/> No Prior Earnings	1 day ago	▼	↔	1 day ago	▼	

Pre-Earnings Bull/Bear

Click this variable once and you will get the bullish setting. These stocks will report earnings in less than two weeks and in the last 3 years they have rallied into the number more than 75% of the time once they get inside of this window. Look for stocks that have not run hard and that might attract buyers ahead of the announcement. Consider selling ATM weekly put credit spreads that expire before the number on these stocks. This is the preferred strategy because the market typically rallies into earnings season and you will have that tailwind.

Click this variable a second time and you will get the bearish setting. These stocks will report earnings in less than two weeks and in the last 3 years, they have declined into the number more than 75% of

the time once they get inside of this window. Look for stocks that have not tanked and that might attract sellers ahead of the announcement. Consider selling weekly ATM call credit spreads that expire before the number on these stocks. Make sure that the market is trending lower if you use this strategy.

Pre-Earnings Today

This search variable will help you identify companies that announce earnings after the close today or before the open tomorrow. This is a great search to run during the heat of earnings season. Check your current positions and be mindful of stocks that are in the same group as your holdings.

Projected Earnings

Use this variable to see which companies will be announcing soon. You can define the date range and plan for the release. In some instances, you might want to find expected release dates that are well into the future so that you can sell near term credit spreads without worrying that they will span an announcement. We want credit spreads to expire before earnings. When we buy options we want the options to expire after the announcement so that they retain their premium. These options will be less vulnerable to premium decay because the IVs will stay elevated.

Post Earnings Today

This search variable will help you identify which companies announced earnings after the close the prior day or before the open today. Use this in conjunction with other variables like: > Prior Day High, Compression Out, High- Trendline Breach to confirm strong earnings reactions. Did you just gloss over that last sentence? Don't just read the words in this article, understand the concepts and try to visualize them. Take a moment and think about what those other variables represent and why it might be good to include them.

No Earnings Within

This is an effective search variable when we are looking for longer-term trades. If the market is in a strong trend and we want to take a longer-term position, we want to make sure earnings are as far off in the future as possible. Even for shorter-term trades that might span a few weeks, we can avoid having to exit prematurely because the stock is about to report in a few days. Stocks can be volatile as the earnings release approaches and this variable helps us avoid stocks where the price action could be choppy.

Post Earnings Bull/Bear

I mentioned earlier that stocks often take a couple of weeks to show their true colors after reporting earnings. The bullish setting for this variable looks for stocks that have reported in the last two weeks

earnings. The bullish setting for this variable looks for stocks that have reported in the last two weeks, that rallied on the news and that are trading above the opening price after the earnings release. The bearish setting looks for stocks that dropped on the news and that are trading below the opening price after the earnings release.

Prior Earnings

We can search for stocks that have recently reported earnings using this variable. It can be combined with other variables to find stocks that are strong or weak after the earnings release. Earnings announcements have a very powerful impact on the stock price and the guidance often sets the tone for the entire quarter.

No Prior Earnings

If the company has recently reported earnings, we can exclude it from our searches. Remember, we like to wait at least a week before we take a position after an earnings report. The stock will often chop around before its true direction is revealed. This variable helps us to avoid this volatility.

Chapter 7: Use Alerts To Buy Dips

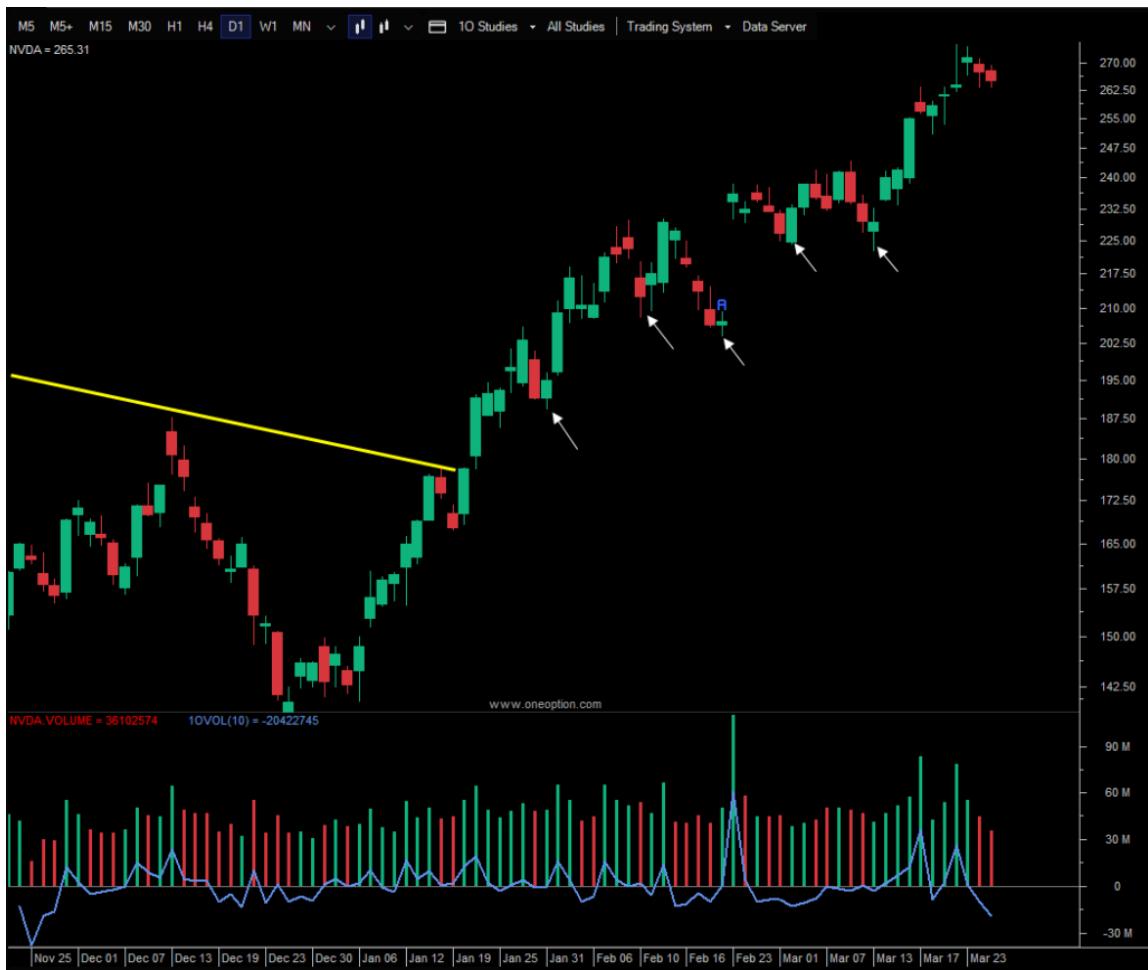
Stocks do not go straight up or down and even the strongest ones have pullbacks. Here's how to use the alert feature in Option Stalker Pro.

I have been working on a solution that addresses the age old dilemma of... “buy now or wait for a dip.” Here is the issue. When a stock makes a major D1 breakout on heavy volume and it has relative strength, we know institutions are buying it. We add the stock to a watchlist and it continues to grind higher. Everything looks great, so we buy the stock. As soon as we enter the trade, the stock pulls back. Now we are wondering if we should take a loss or add to the position. We know from Hari’s “walk away analysis” that we need to give the trade some breathing room, but we can’t help but wonder why we always seem to enter the trade at the worst possible time.

Why Set Alerts?

First of all, there is a reason why “walk away analysis” works. Stocks do not go straight up or straight down. If your market analysis is good and your stock selection is good, you need confidence and that comes with experience. Stick with the position and it will come back and start heading in your direction. There are two

critical components to price action. The first is a breakout and that movement through a critical price point is what gets the stock on our radar. The second element is follow through. We enter on the breakout, but we need continuation to make money. Often, the stock has exhausted a lot of energy on the breakout and when we enter the trade it is out of gas. The stock loses its momentum and it retraces. Now we are losing money and we start to question our initial analysis. The chart below is Nvidia. It is the strongest performing stock in the S&P 500 this year and you can see how the stock has a key breakout and lots of dips.



Even the strongest stocks have dips. Buying each of them would have worked beautifully.

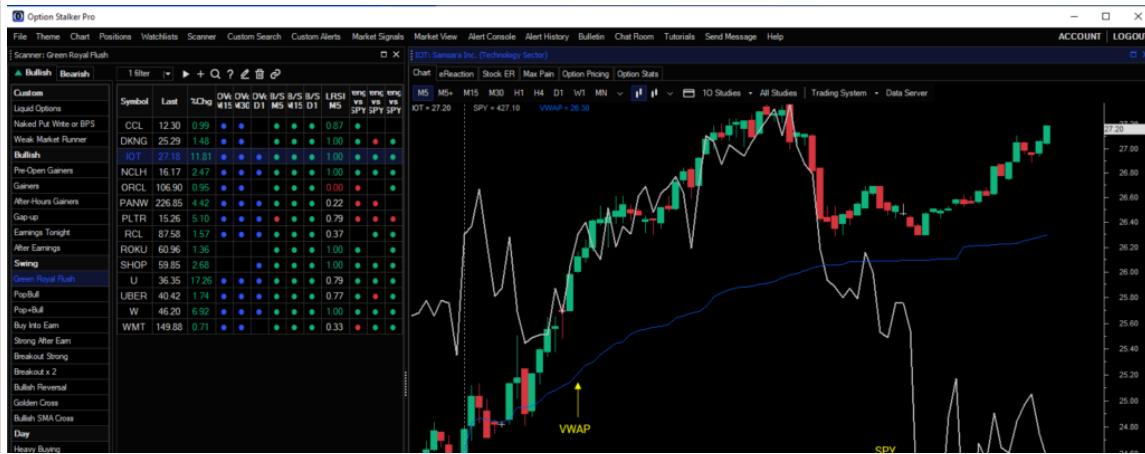
I believe that alerts are the solution. Instead of taking a position in the stock, we can set an alert. It won't cost you any money to do this. There is no capital commitment, no position, no emotional attachment and you are in complete control. Often conditions change and the alert gives you time to evaluate the trade from the sidelines. The problem is that alert lines and price alerts take time to set.

I've spent thousands of hours dropping alert lines and they have been invaluable. Instead of chasing hot stocks, I set an alert below the current price and I wait for the alert line to be triggered. Once it's been triggered, I set alerts above and below the current price. If the stock keeps moving lower, I set new upside alerts at lower prices. I want to buy this stock, I just want to enter it as best I can. There

are times when the stock retraces more than I would like and that tells me that sellers are active and that the upside is limited. In these instances, I am glad I used alert lines instead of chase the stock because I would have a loss. There are other times when the first upside alert I set is triggered. Now I've had time to evaluate the stock and the market and I can decide if the trade still looks attractive. This method is effective, but it is extremely time consuming. There has to be an easier way.

Once I have identified a strong stock, the goal is to enter on a dip. Some stocks do not dip and they just keep going. The vast majority of stocks do retrace and I have to be willing to let the handful that don't go. We can't catch them all. Good stock searches put the best stocks in front of us, now I just need to find a way to easily place alerts on the stock. I would love to buy a 3/8 EMA cross, RS/RW, VWAP cross, or an LRSI cross, but those indicators are already on buy signals. What if I could set a condition where the indicator had to go from bullish to bearish and then to bullish again? This feature would certainly make it easier to set an alert. What if I could use multiple variables at the same time? If the stock dips below VWAP and then rallies back above it on relative strength and heavy volume, that would be a good entry point. To take this a step further, what if I could set this alert on a stock search that contains the strongest stocks with just a few clicks? Now instead of spending time flipping charts and setting alert lines, I can spend my day managing alerts and buying dips on the strongest stocks.

This is a feature that was released in 2023 for a handful of variables (LRSI, RS/RW and our B/S signals). In the example below, you can see how this would help you to enter a trade. IOT was in our Green Royal Flush search. If you look at all of the RS/RW crosses M5 for the stocks in the list they performed well with a couple of exceptions even though the market closed near its low of the day. Not all of the stocks will work and that is fine. This method helps us avoid those dogs. We want the stock to preserve most of the gains and we don't want it to spend much (if any) time below VWAP. In the example below, IOT was a stock I highlighted in a video Friday. It had a great D1 and it preserved most of its gains during the day. When the SPY found support (double bottom), the stock regained its relative strength and it shot higher. This was an excellent alert.





This stock held its gains well during the day and it regained its relative strength when the market had established support. The alert was triggered and this was a nice entry point for a buy.

Alerts for Swing Trades

This method also works well for swing trades. For swing trades on strong stock like NVDA, you would set an LRSI alert when the M30 goes < 20 and then > 20 . That is a buy signal according to the rule base and I would use a slightly longer time frame like M30 because it is a swing trade. If the alert is not triggered, there is no opportunity to buy a dip – no harm, no foul. If it is triggered, you can evaluate the market and the recent price action in the stock. If everything still looks good, you will have an excellent entry point for a strong stock. I will be adding the alerts to the Portfolio screen so that you can set exit alerts on your positions. One final note, if the market has a light volume “inside day,” you will want to lean on these alerts for your entry because the stock is more likely to pullback. If the market has a gap and go higher, you might want to buy some shares early and then use the alerts to add on dips. I believe these alerts will change the way we trade.

Chapter 8: Why AVWAP Is Important

The key to VWAP is knowing where to anchor it. There are events where Asset Managers and Traders make allocation decisions and that is where we anchor ours.

Liquidity is an issue for large institutions. They often use a firm like Citadel to execute the orders and the VWAP is a price they guarantee for the fill. It is not necessarily the intraday VWAP although that is relevant for day trading because it is used for smaller orders. For large orders that could drive the price, they need time to fill the order. The fill price could be a VWAP since a particular date (earnings) that Citadel has to honor, and they will work that order for days or weeks. It is important to know where these price points are and when Asset Managers are likely to make allocation decisions. I have been working with anchored VWAP (AVWAP) that calculates the D1 VWAP from a user defined starting point and here are my observations. [This 1 hour video will also help you to understand it.](#)

In addition to large Asset Managers wanting to buy the stock, trading firms are active in their proprietary accounts. They stress discipline, but they do not want to completely handcuff traders. As long as the stock is within 1SD of the AVWAP, the trade is in an acceptable range. This is an industry standard and I have heard it from a few sources. I also don't know where these firms anchor the VWAP, but I can take an educated guess.

Anchor Points

The key is finding the right anchor point. Just like VWAP starts at the beginning of the trading session, we need to determine a good starting point for AVWAP. In my experience earnings releases and the end of the quarter are key decision making periods. Earnings announcements allow Asset Managers to gauge current performance and the company's guidance for the future. This is when they would decide to buy (or sell) a stock. The end of the quarter is also a time when they decide how to allocate funds. This is also when many indices rebalance.

SD Lines

The distance from the AVWAP is important. If Citadel is going to honor an AVWAP price, they will be active when the customer places the order. They have algorithms to execute the trade. Once the stock or index moves away from the AVWAP, it becomes support. Anyone looking to ride that trading will buy at the AVWAP. They might have missed the trade or they might be looking to add to a position so it will act as support. It is important to realize that AVWAP is different from support at a major moving average. Major SMAs are a psychological support level. On the other hand, AVWAP is actual support because firms are allocating funds at that level with real money. Once the stock/index moves substantially away from AVWAP, institutional traders can still enter within 1 standard deviation. If it rises above that level, they will bite at the chance to buy at that level if it dips down to it. Obviously, this is only the case if the stock is strong. Some stocks will just chop around the AVWAP and they are not of great interest to us. Imagine if we had a variable that triggered an alert when the stock rallied above the 1SD AVWAP, back below it and then above it again (we will have it).

So let's take a minute to talk about the 1 SD lines above and below the AVWAP. We take the current daily value of the 20-day standard deviation for the stock price (not the 20-day standard deviation of the AVWAP) and we add that value to the AVWAP for the upper line, and we subtract that value for the lower line. That gives us our upper and lower bands.

In the first chart, we are going to look at SPY on a quarterly basis. The far left of the chart is the start of Q2 (ignore the lower dark green line). The heavier dark green line is the AVWAP from the start of the quarter. The market spends sometime around the AVWAP and then it runs away from it. Any trader who missed that entry is going to be waiting for a pullback to the AVWAP. Consequently, it becomes support. You can see how the market did not spend much time there before it lifted off. Next, the market rallied above the 1SD level.

Traders who were looking to add would be waiting for any dip to the 1SD level and they only had one day to

traders who were looking to buy would be waiting for any dip to the 1SD level and they only had one day to buy there.



Once the market lifted off from the quarterly AVWAP, that level became support and traders were anxious to buy there.

The next chart is MSFT and the AVWAP starts the day after the earnings report because it was posted after the close. If Citadel has an order to buy VWAP, they are going to buy heavily on that first day and that is why the stock gaps up. They will continue to add close to the AVWAP and since the stock is rising, they will be able to enter around the AVWAP. They won't make money honoring every AVWAP order, but they will on the vast majority of them and that is why they make so much money. According to the CEO of Citadel in a Congressional testimony, Citadel touches 35% of all orders and they use VWAP algorithms extensively. Once MSFT drifts away from the earnings AVWAP, the stock rises above the 1SD point. It is out of reach for institutional traders and they pounce on the first pullback to that

level. You can see how it acted like a magnet towards the end of the chart.

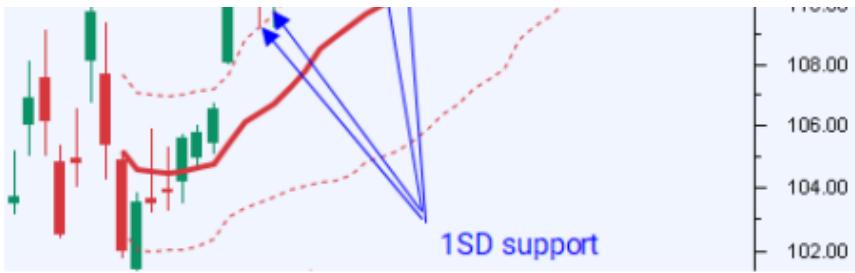


The stock does not spend much time at the earnings AVWAP and that is a sign of strength. Traders will even buy at the 1SD for AVWAP if the stock is particularly strong.

How is This Useful?

How do we use this information? Knowing where institutions are buying or selling tells us where we can expect support and that helps us with our entry. We want to join them. You will also see in the MSFT chart that when the stock rallies above the 1SD level, there is some resistance. Trading firms will lighten the load at those levels and take gains with the intentions of re-entering when the stock comes back within that range. Knowing this helps us manage the profits on our trades. Here are a few more examples.





Here you can see how the AVWAP is a magnet. Once the stock moves away from it, the 1 SD line becomes a support level.

This will be a new 1OStudy and you will be able to add it to the charts for Earnings, Monthly and Quarterly anchors. The anchor will start with each new event and end at the start of the next event so that you can scroll back and see how well these price levels performed.

Chapter 9: How To Use AVWAPE

This anchored VWAP starts on the first trading day after an earnings release and it ends on the last trading day before the next earnings announcement. Here is how to use the study.

There seem to be as many indicators/studies as there are traders and most of them are derived from an older version of an original indicator with some new twist. That means they all essentially measure the same thing. In the case of simple moving averages (SMAs), they work because everyone uses them and they are “self-fulfilling.” Other indicators work because they allow us to easily gauge what is happening with regards price, volume and time. As you mature as a trader, you settle into the indicators and the settings that work for you and it is pretty rare for me to add something new.

A year ago, I read a post by an old colleague of mine ([Brian Shannon of AlphaTrends](#)). He built a systematic trading approach around anchored VWAP and he felt strongly enough about it to write a book. Brian has been trading for as long as I have so that got my attention. I use VWAP on an intraday basis because I know that executing brokers like Citadel guarantee that price when they are executing trades for funds. That price level is relevant and they are motivated as the stock/index moves above and below that price. What I had not contemplated is that very large orders take time to execute. In an effort to reduce market impact they have to

spread that order out. The larger the order, the more time they need. That means that an anchored VWAP could have relevance way beyond the current day. The problem is identifying the moments when funds are motivated to buy or sell a stock. [Here is a 1 hour video I recorded on AVWAP](#) that will also help you to understand it.

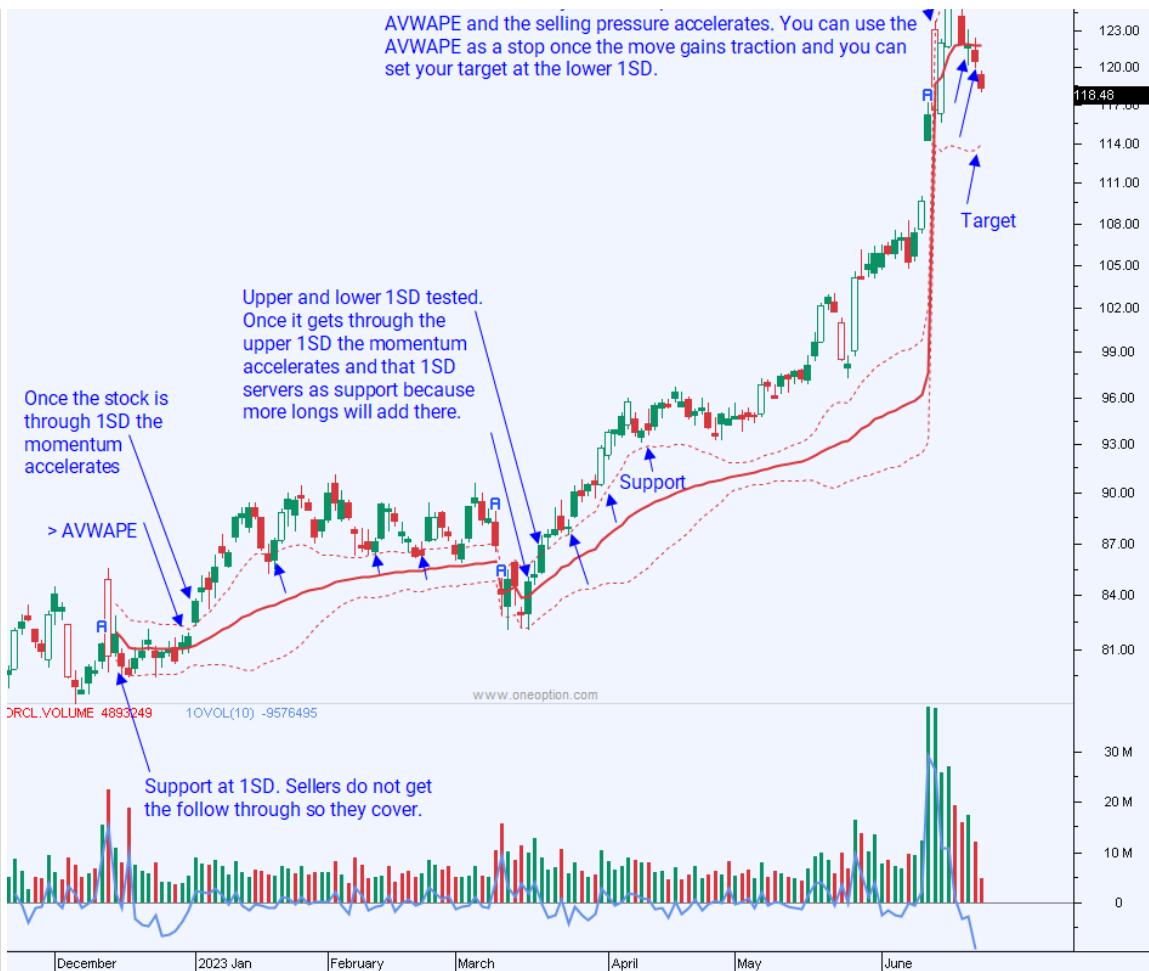
What is AVWAPE?

Four times a year, companies provide us with a health report. They post earnings and most of them provide an outlook for the next quarter. This is exactly the type of news that would interest a Fund Manager. Based on that news, they will decide if they want to buy shares or sell them and they would solicit the help of a firm like Citadel to execute the order at a guaranteed VWAP over a period of days or weeks. That makes the AVWAPE relevant during those earnings releases and I call it AVWAPE (the “E” is for Earnings).

This concept seemed valid so I started collecting data. As I started to view the data, I could see that the AVWAPE was relevant. What does that mean? When a stock has been above that level and it comes back to it, there is support at that exact level. There is no other visible means of support or resistance (moving averages, trendlines or horizontal) that could be influencing it. That tells me that other traders are aware of this price level and they take action at that price level. If this concept is relatively new, then most retail traders don't have it on their charts. It is not a psychological level like an SMA. Other traders are involved at these price points and that leads me to believe that institutions are using it. Sometimes, the stock will bounce off of that level and resume an uptrend and sometimes the stock will breakdown below that level and it becomes resistance. I have found that AVWAPE adds a level of clarity.

Proprietary trading firms have rules that they impose on traders. I am not talking about “prop shops” that lure in “wanna be traders.” I am talking about trading desks at Goldman Sachs or Morgan Stanley. Traders are gauged on their performance. If they are performing well... no questions asked. If their performance slips, they have to start justifying their actions. “Why did you buy /ES when it was 2 standard deviations above the VWAP?” I don't know if these firms use AVWAPE, but I thought I would add the 1SD to the study to see if it had any relevance. I believe it does. It could be because a firm like Citadel won't buy above that level. If they do, their cost would be elevated and they will lose money honoring AVWAPE. They will be very passive buyers at that level. In fact, they might even be net sellers at that level. Citadel has proprietary algorithms. They see everything because they “touch” so many orders and that information allows them to gauge the buying and selling pressure. If they feel that a small sell program can chase traders out of a position they will run it so that they can accumulate closer to the AVWAPE. The 1SD level could be where institutional traders for Goldman or Morgan are restricted. I am not privy to how these algorithms work or to the rule bases that govern institutional traders. I really don't need that insight. All that matters is that those price levels are relevant. I would encourage you to add AVWAPE to your charts. Go back and look at the last 4 earnings reactions. The chart below is ORCL and you can see how important these levels are.





Notice how traders respond to the AVWAPE and the 1SD. That tells us that these levels are important. This indicator adds transparency.

Does AVWAPE Work for all Stocks?

If the stock has a muted reaction to the earnings announcement, it is less relevant. The stock is trapped in a range and the earnings release might not have provided any new and material information. Chances are the stock will spend time around the AVWAPE and within the 1SD lines.

Is AVWAPE Relevant After a Huge Earnings Gap?

Yes, but realize that large moves are going to take time to digest. A firm like Citadel will have many orders. On a big gap up, there will be buyers and sellers (profit takers). I'm sure the first thing they will do is to pair those orders off and they will gauge which way the stock wants to go based on that order flow. Sometimes it will take weeks before we get a clear picture of where the stock is headed. If it spends time at the upper 1SD and it can't breakout, eventually that selling pressure will build and the stock will retest the AVWAPE. If it quickly falls below the AVWAPE on a large red candle and heavy volume, it will be a sign that traders are exiting the longs and often the stock will fall to the lower 1 SD line. On the other hand, if the stock finds support above the AVWAP or if we see a bullish hammer off of the AVWAPE, it is a sign that buyers are interested at that level. We use the same principles we use for other support and resistance levels. This same

interested at that level. We use the same principles we use for other support and resistance levels. This same concept also applies to stocks that are trading at the lower 1SD line. If it can't be penetrated, it will become support and the stock will rally up to the AWWAPE. If it blows through that level it will test the upper 1SD. If it pokes around the AWWAPE and you see a bearish hammer off of it or below it, resistance is still intact.

Can you use the AWWAPE 1SD as a Target?

Yes. I would take partial profits at those levels and then wait and see. If the stock moves through the 1SD with ease, it is likely to continue the move higher. Then you can use the 1SD as a stop.

Can you use AWWAPE as a Stop?

Yes. If you bought a breakout above AWWAPE, you want that level to hold. Ideally, the stock moves quickly through the 1SD. If it spends time at the upper 1SD you can use the AWWAPE as your stop (stock closes below it). If you bought a breakout above the 1SD, you can use the AWWAPE as your stop. Once you are in the trade, you want bounces above the AWWAPE. Buyers need to be aggressive/hungry at that level. As with everything I have taught you to this point, we don't trade light volume breakouts on choppy stocks. We want that solid D1 chart with relative strength, heavy volume and stacked candles. These elements need to be present with any trade.

What is Your Favorite AWWAPE Setup?

From a bullish standpoint, I like stocks that don't have a monster earnings gap up. Those moves take time to digest. Regular earnings reactions test the upper and lower 1SD lines for AWWAPE. I like the ones that shoot through the upper 1SD AWWAPE line. They hold above that level for a few days. That AWWAPE 1SD line becomes support and I like the trade even more when the stock starts to rally away from it. That is a true sign of strength and it tells me that trend is likely to continue.

If 1SD is Resistance & Institutional Traders are not Inclined to Buy Above it, who is Buying?

To fuel a move higher, it has to be "big money." Sure retail traders can have some impact, but it is minor. The move higher has to be a long-term Asset Manager(s). They don't care that the stock is above the 1SD AWWAPE. They like the long term fundamentals and there has been a material change since the last earnings report. These buyers plan to own the stock for years.

I wrote an article on AWWAPE because I have researched it and because I find it very useful. I have not spent as much time with AVWAPQ or AVWAPM.

Option Stalker Pro is not a “run of the mill” trading platform. It has all of the standard features, but if I add something it has to be relevant. That is why this platform has features that you will not find anywhere else. I understand why AWWAPE is used by institutional traders and based on my observations I can tell that they do use it. Don’t take my word for it. Conduct your due diligence and draw your own conclusions. You had to go through the same process when you learned to trade RS/RW. It made sense, so you investigated it. You also had to go through the same process with 1OP M5 for SPY. In the case of 1OP, you don’t know why it works, only that it does.

I have studied AVWAPQ (quarterly anchors based on triple witching), but not to the extent of AWWAPE. I have found it to be useful for indices and Fund Managers tend to make allocation decisions at the end/beginning of the quarter so this anchor makes sense to me. This is also when indices rebalance. They don’t have earnings and that is why this anchor might be relevant. I have added AVWAPM (monthly anchor to the first trading day of the month) since more and more Asset Managers rebalance on a monthly basis. I still have to observe the significance of this anchor and having a few hundred eyeballs on it will help. Please share your observations.

Chapter 10: Automated Trendlines

As of this writing, I don't know of any other retail platform that offers automated trendlines.

Automated trendlines are very difficult to draw and they have taken me many years to develop and to perfect. They were one of the first features added to Option Stalker Pro in 2012. Although useful, those lines have been refined and improved many times in the last decade. New concepts on how to draw them have come piecemeal. Some of those ideas were garbage and some of them served as building blocks for what we have now. The solution we are about to release in February 2023 is game changing and some major puzzle pieces have come to me in the last 6 months. I’m never satisfied and I am always looking for ways to improve, but I believe I have a definitive solution and I will tell you why in this article. I will also cover many other important topics. Make sure to [watch this comprehensive one hour video](#) on our automated trendlines when you have finished reading this article.

Why are trendlines important?

Trendlines are the oldest and the most widely used form of technical analysis. Anyone with a pencil and a straight edge can draw one. Because they are widely used, they are relevant. There is another advantage to trendlines: When the stock is in a strong trend, these lines will confirm it. When they are breached, they often signal a reversal well before any technical indicators will.

Why are trendlines so hard to draw?

Trendlines are easy to draw manually. You do not even need a tool and most people can do it visually. All trading platforms have a trendline tool. You connect two endpoints and the line extends. Some trading platforms like Option Stalker Pro will draw that trendline and when it is breached, an alert is generated. Not all trendlines are created equally. Trendlines that are very tight to the current price action will generate many false signals. Every little wiggle and jiggle will trigger a Low+ alert and generate false reversal signals. Then the stock will continue grind higher. The endpoints of a trendline need to have some spacing to give the stock room to move. When we draw these visually, we can account for that and the endpoints are easy to identify. Determining valid endpoints arithmetically is extremely difficult. This was one of the many stumbling blocks I ran into.

Why do we want to automate trendlines?

For those of you who draw trendlines, you know the answer. It takes a very long time to flip charts, determine endpoints and to connect the lines. It is tedious work. Good traders take the time, lazy traders don't. There are often multiple trendlines for the same stock that need to be drawn. Every time a trendline is breached, it has to be redrawn and this takes hours to do each day. If the lines appear automatically on the chart they add so much clarity. You won't always catch where they come into play visually and you will miss many of them (especially longer-term trendlines). I equate this to sight fishing without sunglasses and then putting on some polarized shades. All of a sudden the fish appear. It is the same with the trendlines. Patterns that were hard to see instantly are visible and can easily be incorporated into your game plan. When you flip hundreds of charts a day, you get very proficient at learning how to trade these automated trendline breaches. When you draw them, you might see a couple dozen across many stocks because that is all you have time to draw. When they are automated you see thousands of them because they are on every stock. The final reason (and perhaps the most important one) is that we can search for these breaches. How many times have you looked at a chart and thought, "Dang, that was a nice trendline breach and I missed it." When you can search for these breaches, they are delivered to you on a silver platter. There are three major advantages to automating trendlines. It saves valuable time, we can see lines that we would not otherwise notice and we can search for breaches.

What are some of the basics?

[We covered this](#) in the first sections of The System so please make sure to read that article before you continue. The longer the trendline, the more relevant, the more touches the better, the steeper, the less reliable. We connect highs and lows and we do not draw through the body of the candle.

How do we know when we have drawn a good trendline?

This is an easy one. When your trendlines are breached, is there movement on heavy volume? If not, they are

not significant price points. Institutions use trendlines to identify critical price points. When they are violated, you will see movement because the institutions are active. I have visually tested these trendlines for months and I know our trendlines are relevant. Some trendline breaches have minor follow through and they reverse. This is not a bad thing if the reversal is strong. It is a sign that that trendline was significant and when it was breached it produced a strong contra move. Remember, trendlines identify support and resistance levels. They are more likely to hold than to be broken. The breakout and then the strong reversal confirms that this was a significant price level. Some trendline breaches will have excellent follow through. This is a legitimate breakout and now that the stock has broken through that level, it will gain momentum.

What is an algo line?

One of our Feature Traders Dave Wyse describes them as trendlines that are algorithmically drawn by institutional trading programs. Dave is meticulous in how he draws them and he is an incredible trader. If you watch him nail trades, you can't help but wonder how he does it. If trendlines are part of his success, then we should all use them. I have been on my own trendline journey for many years, but Dave has certainly inspired me to keep pushing. My goal is always to automate processes so that we all have the same research and I've taken many of his concepts and incorporated them into these trendlines.

Are our trendlines algo lines?

Only Dave can answer that. I believe that within all of our lines there are algo lines, but not all of our lines are algo lines. Don't despair there is good news.

Why do we have so many lines?

After spending a decade on trendlines, I believe that there are many lines that emanate from many valid endpoints. This notion is confirmed by the price action I witness at the intercepts. When I have tried to "tweak" trendlines to make them better, I lose many of the fantastic ones that generate great signals. One small change has an incredible ripple effect and all of a sudden we start losing many great trendline signals. I also feel that institutions use these additional trendline breaches as confirmation for scaling into positions. Even if they don't, I certainly will. I also find that having many trendline breaches in the same direction serve as constant reminders that this trend is strong and that this stock trade is worthy of consideration. Because of my findings, I do NOT believe that additional work is required on the design of my trendlines. They are relevant and I can see that in the price action. Instead, the focus needs to be on the back end. We need to filter current breaches using other criteria. In the next few months we will add additional criteria to Custom Search (OneOption's Scanner) for trendlines. Then, we will be able to specify the type of trendline (High-, High+, Low+ and Low-) and we will be able to select the desired angle of the trendline, the number of days between the end points and the number of concurrent breaches in the same direction that confirm the trend. Those parameters are likely to get each of us closer to the trendlines we prefer to trade, but I don't believe they will get us to algo lines. The final part of the solution is other Custom Search variables like RS/RW, LRSI, B/S signals, SMI, Compression Out, % 60-day Range and Heavy Volume. When we add those variables to our searches, all of the marginal trendlines will be filtered out and we will have our algo lines.

Are multiple breaches better?

Not always, but generally yes. There are times when we might only have one significant trendline. When it is breached on heavy volume and a long candle, it will be as good as any. Typically, we have opportunities to connect longer term and shorter term trendlines. In these cases, multiple breaches are better because more traders are seeing those breaches (one of them is bound to be drawn similar to what other traders draw). Traders don't all draw the lines the same way, so multiple breaches means more people seeing the same thing, which is typically good when it comes to technical analysis.

Why don't we draw lines for intraday charts?

If I thought those lines were relevant, I would draw them. I don't believe that these super short-term trendlines are significant. The first major hurdle is overnight gaps. We have them everyday. That means we have constant M5 trendline breaches left and right and most of them are garbage. For M5 charts using only the data from the open we don't have enough data early in the day to draw a meaningful trendline. Later in the day we often see false breakouts around these lines and they are used by institutional programs to lure traders in and then they reverse.

How do we trade trendline breaches?

As we discussed in the [article referenced earlier](#), we want trendlines attacked. If they are going to be breached and if the next leg of a trend is going to continue, it needs to happen on long candles and heavy volume. If we simply poke at the trendline, there is a good chance it will hold. If we barely break through it, that price level is likely to hold and we could see a trend reversal. Let's divide the 60-day range and discuss breakouts (bullish High+ and High-) and breakdowns (bearish Low+ and Low-) in the lower, the middle and the upper quadrants.

Bullish Breakouts At the Low End of the Range

It's been my experience that trendline breakouts (High+ and High-) in the in the lower quartile need to be handled with care. They are higher risk and higher reward trades. Ideally, the stock has multiple Low+ and Low- trendlines that were recently breached and that failed (Fakes and Bottoms). This combination is powerful and it suggests a strong rebound. Extra caution is required if the stock has been extremely weak in the last few months. If the stock has been in a long term downtrend, the base needs a long time to form. Do not be a "bottom picker". Wait for higher low double bottoms over a period of months. If the stock has nice horizontal support and it is not in a long-term downtrend, it is likely to be a good candidate for a reversal. The stock will be below the major moving average, so we want to see it attack those price levels with long green candles. Chances are, the first few trendline breakouts will have room to run before it reaches the major SMAs. Remember that a stock that is in a serious long term downtrend will have short covering bounces that are "traps". When those bounces fail, the next leg of the sell-off will resume, meaning this

bounce is likely a bear flag. Let's take a quick break to look at an example.

Example 1: Long-term Downtrend

The stock below has been in a nasty long-term downtrend. The following analysis will reference the numbered blue shaded areas on the chart. To the left you can see that the stock had a steep sell-off and the Low+ and Low- trendline breaches were attacked with long red candles. Those were excellent shorting opportunities. In *Area 1* the stock bounced above the most recent Low- trendline. Was this a good reversal to buy? No, but it was a sign to take gains on short positions. After a massive 33% drop, we needed to see more signs of support before buying. In *Area 2* we had a Low+ breach. Was that a good short? No. The stock had been showing signs of support and we needed to see it blow through the prior low with a long red candle. That Low+ breach turned out to be a fake. Now we have a double bottom higher low. This still would have been a risky entry for a long. In *Area 3* we can see a triple bottom with higher lows. We also have two High-breaches and a High+ breach. The long green candle closing on its high and above horizontal resistance is what we needed to see. The open from that candle is tested and it holds. Given the severe drop in this stock it is not a solid buy until it gets through the 100-day MA (black line). Even then, that breakout retraces. This is NOT a sign of a strong stock. If buyers were truly engaged, they would act like they will never have a chance to buy this stock at this price again and you would not see retracements like that. Now the stock is in the middle of the range and it has been able to hold gains off of the bounce and it has preserved the 100-day MA. In *Area 4* we have a longer term High- breakout. Notice the stacked green candles? This is how we want to attack a trendline – right? The stacked “greens” are nice, but we are right at horizontal resistance. We need to blow through that on heavy volume. That would convince me that a longer-term trend reversal is underway. That does not happen and the stock has a High- Fake when that breakout fails. Is this a good short? There is horizontal resistance and a lower high, but it would be too early to get aggressive at this level. Maybe an OTM call credit spread above \$320 would work. That will give you some breathing room in case the stock does breakout. Heading into *Area 5* we can see stacked “reds” that are also Key Bars and the 100-day MA is obliterated. This is where you can get short. We have a Low+ breakdown and two Low- breakdowns heading into area 5. Once the stock reaches *Area 5* we are testing horizontal support. We can see that some Low-trendlines have been breached and those breakdowns failed. We can also see many longer term trendlines coming into play at the low. This is a sign of strong support. Is this a good area to buy in? No. As I have mentioned before, we have two mixed Key Bars at the low. This is a warning sign of volatility and a big move is pending. The speed of the recent drop tells us that sellers are aggressive. That is a major warning sign. Also notice the “B”. That is an earnings release and the reaction is negative. We have major support and all of the trendlines tell us this. We need more proof that this support is going to hold and we needed to see some stacked consecutive “greens” after earnings and we did not have that.





Trend reversals at the low end of the range need to be handled with care if the stock is in a long-term downtrend.

We concluded with area 5. in the last chart, so that is where we are going to start this chart and it is labeled area 1. After a brief bounce off of major support, the stock breaches all of those trendlines with stacked “reds” on HUGE volume. This is not a “mamby pamby” jab at support, this is a major breakdown and it is a sign that the next leg lower is about to start. Near that horizontal support you still might expect some “after shocks”. Buyers are still engaged, but passively. Bottom pickers are also active in area 2. When those Low- trendlines fail, bottom pickers puke out their positions and longer term buyers pull bids. Then the bottom falls out and we see consecutive stacked “reds”. The whole way down you can see lower highs and the bounces are shallower and they are shorter in duration. Even before the waterfall, these were signs that sellers were aggressive. If you can’t bring yourself to short stacked consecutive “reds” on massive volume, you need to learn how to (start small) or you need to find another profession. These are golden opportunities. Look for all of these signs leading into those candles. These are the trade set-ups we dream of. You need to catch these early. Since we are shorting at a relative low, yes it is risky. That is why you need all of the other signs I have mentioned. In area 2. you would have some longer term shorts on. When those Low- trendlines failed, you would have the stock on your radar and you would see those stacked reds on volume right away. That is when you can add to the shorts and get more aggressive. We can expect “Solos” along the way. That is short covering and after a move like this, traders will lock in gains. We can take some gains in area 3. but we do not need to take all of the gains until the end of area 3. There we are seeing some signs that support is forming. We have gone through a lot of information, but it is important for you to see the thought process along various points. Let’s continue with some of the generalizations we can make about trading trendline breaches within different parts of the 60-day range.





This stock was in a long term downtrend. Many Low- trendlines in one area tell us it is an important price point. When it is breached, the selling accelerates and the next leg lower begins.

In general, breakouts in the middle of the range tend to have nice follow through if the trendline is attacked. The stock has had plenty of time to form support and the move off of the low should be nice and steady with very few retracements. These trendline breaches have plenty of room to run because they are in the middle of the range. The stock needs to blow through major SMAs (50,100,200) that come into play with long “greens” on heavy volume and green Key Bars are always welcome. If we have that, the stock has plenty of room and momentum to get to the high end of the 60-day range. This is also true of stocks that are pulling back from the high end of the range. Resistance has been confirmed and we should be seeing nice long red candles and very little retracement. Ideally, we also have a lower high double top. As the stock approaches the major SMAs, it blows through them along with the trendlines. It has plenty of room to fall before it reaches the low end of the trading range.

Bullish trendline breakouts in the upper quartile of the range can also be excellent as long as the move higher has been nice and controlled and if the stock has not traveled far in a short amount of time. We want that breakout with long green candles and heavy volume. Because the stock has a running start at horizontal resistance, it should have the strength to blow through resistance. If the stock rests and compresses at the high end of the range and it has traveled far in a short amount of time, we have to use greater caution. It has spent a lot of energy getting there and multiple High+ and High- trendlines will be hard to penetrate. If the stock pokes through and the breakout instantly fails, we can expect a pullback from the high and a possible reversal. If the stock is in a long term downtrend and it is at the top of the 60-day range, we should expect resistance to hold. We want the stock to poke through

resistance and we want to see those breakouts fail. When they fail, this could set up a great shorting opportunity on confirmed technical weakness (long red candles and a double top lower high). So let's take another break and look at a stock that has been in a longer-term uptrend.

Example 2: Long-term Uptrend

I intentionally picked this stock because it is moving well, but it is in a choppy uptrend. First of all, we want nice orderly price movement. That action tells us that buyers or sellers are in control and that action explains why the candles are nice and tight. We've covered this price action in previous articles. This stock is not bad, but we need to temper our expectations when we trade it. Chances are it is not going to rocket higher, that is not its nature. This is a stable company that has been around a long time. It has not figured out the next gizmo that is going to reverse global warming so we should not expect parabolic rallies.

Let's start with area 1. that is in the lower quartile. We can see support coming from two Low+ trendlines. They are attacked with a long red Key Bar. This looks promising, but we know from looking at the historical price movements before the start of this chart that it is choppy. "Measure twice, cut once." Shorts on that move are immediately disheartened when the green candles after the red Key Bar retrace it. This is NOT a sign of relentless selling, this is a sign that buyers are interested. Bullet dodged and we wait. Now we see a Low+ Fake (gosh I hope you know what that means by now). Have you noticed anything else in this chart that is different from the first stock we looked at? We are near the 100-day MA already. Even though we are at the low end of the range, this stock has been relatively strong in the past and we rallied above the SMA. Is this a good buy? We do have a Low+ Fake (bullish) and we are above the 100-day MA and we are getting through a horizontal resistance level. We also have a double bottom low. Given the nature of the stock, I would not go gonzo buying calls, but yes a bullish put spread below the 100-day MA makes sense. In area 2. we have three High- breakouts so the strength is confirmed. This is horizontal resistance near the high end of the range. We want to see stacked "greens" attacking that high on heavy volume, but we do not have that. The candle bodies are tiny and the volume is drying up. We can day trade the breakout, but we need to be cautious swinging it. The red Key Bar at the end of area 2. is a warning sign. We do not want to see those at relative highs and it is a sign of resistance. Would the High- Fakes be a good short? It is too early to tell, this is probably just profit taking vs aggressive selling. We did see three consecutive red candles on good volume, but we know this is a choppy stock and it is above the 100-day MA. What you do NOT see in this chart is the market. When you add that puzzle piece you realize that this pullback is market related. The market is tanking and this stock actually has great relative strength. It is NOT a good short here because there are hundreds of other stocks that are falling below major moving averages and trendlines on stacked "reds". Those stocks and not this one are good shorts. This stock might actually be one that you want to buy to hedge some of your shorts. Remember earlier I mentioned that the algo lines will reveal themselves when we add filters and other important variables? Relative strength would certainly be the most important one. So the stock finds support and we see a bullish

hammer well above the 100-day MA. It recovers quickly and it blows through the high and it breaches a High+ trendline. The volume is good, but it quickly fades. In this instance, the pullback is 100% market related and we know that because all of our analysis starts with the market. We can see the bottom falling out of the market so our focus at this moment is on shorting other stocks. When this stock gets to area 4., the longer term trendlines are congested. This is a major resistance level. At a time when most stocks are below all of the major moving averages, this stock has preserved the 100-day MA. FYI, I did not add an SPY overlay or other moving averages to the chart because it would be too busy for this lesson. You can see in area 4. the stock does get through resistance on good volume. The candles are tiny, but the volume is good. Buyers are not super aggressive because of the market, but this stock is moving higher and we have opportunities to trade it from the long side. On these breakouts, we can get long and take gains (hit and run). We do not want to overstay our welcome. Heading into area 5. We have a strong earnings reaction (“B”) and stacked “greens” that blow through the High+ trendlines on massive volume. We can get a little more aggressive here, but we have to be cautious with longs because we are in a bear market.



This is a choppy stock that is in an uptrend. The pullbacks are due to a bear market backdrop and it wants to rally. Short-term trades on these breakouts are best.

We are going to take a look at one more unique set-up. There are many stocks that are not high tech companies. They include consumer staple stocks, industrials, healthcare (not biotech), telecom and many others. In fact, most stocks would fall into this category. Some are more cyclical than others, but

they have steady earnings and “boring” products that consistently make money. They are established and steady.

Example 3: Boring Stocks Making Big Moves

In the chart below, we see MCD. This is a stable international restaurant business that has been around for decades. Why would a stock like this make steep moves? I don't know and I don't care. We do need to check the news and make sure that the move is not related to something that changes the long-term macro backdrop for the business. For companies like MCD, I can't imagine what that might be. Due to the nature of the business, you won't often see news of this nature and that is what makes this pattern attractive. The stock simply gets overbought and oversold. When we get trendlines that are > 45 degrees, that is our time to watch for reversals. We won't draw those steep trendlines, but we can gauge what is happening at the extremes of the range by monitoring trendline breaches at the extremes and by watching for Tops and Bottoms. The blue lines were added to show how steep the move was. In area 1. you can see the multiple High- and High+ trendlines at the high end of the range. These are signs of resistance. The breakout had tiny bodied candles and light volume. This is a low quality breakout. Remember, these trendlines are resistance and at a relative high, they are more likely to fail than to breakout. That is especially true for “boring” companies. It is too early to aggressively short the High+ Top, but selling an OTM bearish call spread above the high certainly makes sense. Next we see a long red key bar. That is a sign that sellers are fairly aggressive. In the middle of the range we see two Low+ trendlines and a Low- trendline that are breached along with the 100-day MA on heavy volume. These are nice long red candles and we are in the middle of the range so we have lots of room to run. In area 2. we make a higher low double bottom and that is where you have to take gains. Again, this is a stable company. The drop has been steep and there is no real reason for it. We need to look for reversals off of this relative low. We don't have any Low- Bottoms that would alert us of an opportunity, but you can see the giant long green Key Bar. This is a sign the stock is going to bounce. Most of these reversals will at least recover half of the move so you can use that metric to plan your trades. In area 3. the stock is back at the top of the range. It has broken through High- and High+ trendlines and there is money to be made there. We know to be fairly cautious with stocks of this nature at relative highs so we take gains and we are watching for signs of resistance to possibly get short. The two stacked red candles off of the high are warning signs and then we have the High+ Top. It is too early to get aggressively short, but selling an OTM call spread above the high would make sense. To the far right we see a Low+ breach on a red candle and the volume is good. We are inside of the old range and this is where we can get a little more aggressive with shorts. One of the added benefits of finding these set-ups is that the option IVs are fairly cheap on established “boring” stocks and the options are liquid. These stocks do not typically make big moves, but this one is right now.

MCD - D1



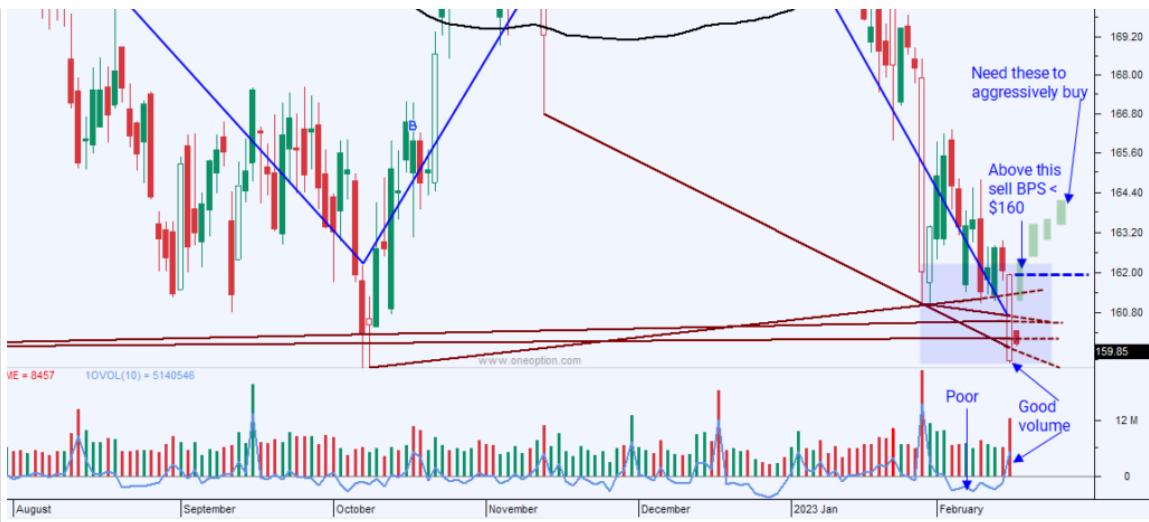


When “boring” established stocks make swift moves, they often produce excellent reversals that retrace half of the move

I am going to conclude this topic with one more stock that is setting up right now (2/16/23). You can go back in time and see if it reversed. The company is JNJ. They are a large medical supply company and they are also in the personal healthcare space. This is a stable company and it has gone through some wild swings. You can see that in the chart below and I will be looking for support at this level and for Low+ Fakes. I have set alerts above the open of the long red Key Bar. Until that is breached, I will not consider a trade. When it is breached, I will start by selling some OTM bullish put spreads below horizontal support. Until I see stacked “greens” I will not get more aggressive with it. Also notice that the volume at the low is light. The red candles look “mean”, but without volume they have no punch. The chart has less trendlines than the other charts I have shown you because I am using the Now setting and not the Past setting. Let’s cover that next.

Example 4: A Boring Stock Reversal That Could Be Setting-up





JNJ is a “boring” stock that could be setting up for a nice reversal. I will be watching the Bullish Reversal search and I have an alert set at the open of the red Key Bar. If that is not triggered, I have no trade.

What is 10TL Past?

The Past trendline display setting shows you all of the trendline breaches and intercepts. This is helpful for many reasons. Until I was able to automate trendlines, I thought I knew how significant trendlines were. A person can only draw so many of them and they have to be redrawn all the time. When I flipped charts, I could see my trendlines, but I had no idea that I was missing so many of them. When I was able to quickly flip charts and see hundreds of trendlines, I became aware of patterns that I was not previously aware of. The Past view gave me that clarity. I’m sure that the Past view will be eye opening for you too. That view also confirms that the trendlines are valid. You can see the price action around them and you can gain confidence in them. When we look at the Now view, we might see a current trendline breach and think, “Yeh, that’s a nice breakout, but I wish the system had caught that earlier breakout.” That’s when you switch to the Past view and go, “Wholly @#%, it did catch it. I just wasn’t paying attention!” Some of you might be intimidated by so many lines, but I am delighted to know that we catch every breakout and breakdown. For day traders, virtually everyone of these breakouts has follow through the day of.

Why do some of the trend lines pass through the candle bodies?

This is a “no-no” trendline rule violation. It has to do with line display and not line calculation. We are not violating this rule. First of all, make sure that you are viewing charts using the semi-log scale. That will correct most of your issues (especially for short term lines). The other issues will be for very long term trendlines. For everyone to see the exact same lines we would need the same display resolutions, data points and spacing between the bars. The long-term price intercepts are valid so please ignore those candles.

What is 10TL Now

The Now display setting will show you any trendline breaches that have occurred in the last 10 days and they will be drawn to the intercept. You will also see any High-, High+, Low+ or Low- trendlines that are within 5 ATRs of the current price and that have not been breached. These are the only ones that are currently relevant and knowing where they come into play will help you plan your trades. They will also keep your chart nice and clean so you can add other studies and moving averages. Here is a chart that looks bullish today. There are more lines than you will usually see using the Now view and there might be times when you do not see any trendlines using the Now setting.



CSCO has broken a number of High- and High+ trendlines. Seeing these breaches makes confirms the strength of the stock and the trendlines make it easier for you to plan swing trades.

How do we trade Fakes, Bottoms and Tops?

To a degree, I covered that earlier in the first example. In future articles I will have many more examples. When the stock reaches an extreme, it matters how it got there and the long-term stock trend matters. If the stock had to travel a great distance to reach support, did it happen quickly? Were there big gaps and stacked red candles? If yes, we need to be aware of the news causing this level of selling. If the stock is in a long-term downtrend, this support could easily fail and if we see stacked red

candles attacking the relative low on heavy volume, a breakdown is likely. If the stock is gradually drifting lower with many stops along the way, it is likely to rest at the low and we should expect those trendlines to hold. We have to wait for those Low+ Fakes and Low- Bottoms. Ideally, there is also a High- breakout as well. With all of these qualities, that is a reversal I would buy. The same is true of stocks that are at the top end of the 60-day trading range. Is the stock in a strong long-term uptrend? Was the drop to the relative low just a pullback in the context of a long-term uptrend? If so, the breakout could be legitimate. Did the stock cover a lot of ground in a short period of time? If it did, it might need time to digest those gains. In time, buyers will get anxious and the stock will coil like a spring and you will get those nice long green candles through the high on heavy volume. For stocks that have relative strength and that are in a longer term uptrend, you do not want to short those High-Fakes and High+ Tops. If the stock is at the top of a 60-day range and it has been in a long term downtrend, those High- and High+ trendlines are a sign of resistance. They are likely to hold (not be breached). If the breakout does not have follow through, watch for failed breakouts. Those will lead to a nice shorting opportunity. Please refer to the first set of charts I posted and you will see that off of the bounce.

Automated trendlines are very complex. That is why you do not see them on any other trading platforms (none that I know of). Even if they are offered, they might not be valid. I can tell you that my earlier attempts to automate them were helpful visually, but I would not trade off of them. They were constantly breached without any follow through and they had to be redrawn. After years of testing, experimenting and refining, we have relevant trendlines that I believe are of institutional quality. You will see lots of movement around these price points and that is what you should expect from decent trendlines. We will have ways to filter these lines and we will find the best ones using Custom Search. I am releasing 5 new bullish and 5 new bearish trendline searches. These trendlines are going to change the way we trade and they will provide you with clarity.

Chapter 11: Automated Trendline Questions

This article will address commonly asked questions and it will provide insight on how we plan to use our trendlines.

Why is There no Trendline for This Stock?

The stock below looks like there should be a trendline and a valid breach. First of all, this system will not

catch all of the lines you can draw manually because of the rule base. However, I can tell you with confidence, it will catch a hell of a lot of trendlines you missed. With that in mind, this trendline was not on Now view because the trendline is > 45 degrees. What it looks like on your platform is a function of the number of candles displayed, the spacing between the candles and the X and Y axis. Let me provide two display examples of the same chart below.



The width of the candles, the spacing, and the periods displayed affect the angle of the trendline.





This is the same number of periods, but the display is much narrower. Notice how the angle is much steeper.

The trendline angle is a function of display, not of calculation methods we use. It also explains why some of the very long-term semi-log trendlines might “appear” to pass through bodies. They do not use our methods. The intercept of that trendline is valid.

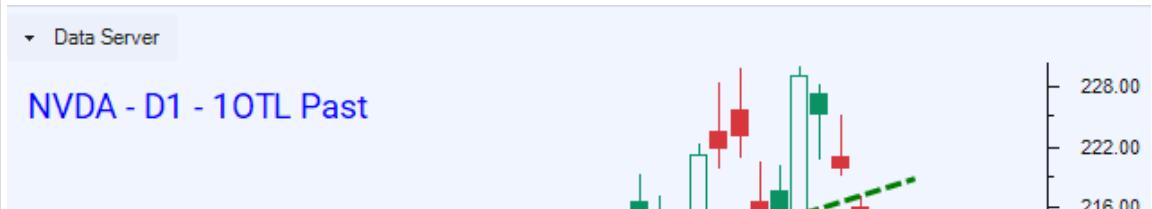
Did we Catch the Trendline for the Chart?

That is the most important part of the question. Yes, in two manners. First of all, we are aware of all trendlines. We have a ton of analysis that we will be doing on them in the future and you will be able to search by trendline angle if that interests you. This was a steep angle and the system knew of the breach. Notice that we are measuring both sides (High+ and Low+). I go overboard on this stuff.



We are aware of these steep trendlines, but these breaches are less reliable so we do not display them.

Consistent with not trading trendline breaches that are > 45 degrees, this is how we are most likely to pick it up and trade it. There was a High+ Top that happened 11 days ago. You would see this using the Bullish Reversal search and it would appear in that search if it happened 10 days or less ago. I have to limit that threshold at some point to reduce candidates. It is easy enough to expand, but typically, we want these fails to happen pretty quickly. We can experiment with it and adjust that if needed. NVDA missed that cut off by 1 day so it was not in the search this day.





Failed breakouts that happen within 10 days of the breach are of interest. That is a sign that the trend might reverse and that the breakout was fake.

The Past View has Trendlines That Don't Seem Right

When I grant you access to this view, I run the risk of discrediting these trendlines because you will see something like the next chart. I spent a lot of time trying to eliminate lines that were drawn during a compression, but when I started adding rule bases to do that (and I experimented heavily), many of the REALLY good trendline breaches fell out. That lead to another conclusion that I will cover in a moment. Embrace the Past view. Look at the breaches when there is heavy momentum and gauge the value of trading around these breaches. Study what happens when a stock reaches a “busy intersection” with lots of

trendlines. Those breakouts will be significant, but so are the reversals. There is a tremendous learning opportunity that you will not get anywhere else. I've learned more about trendlines since I launched this feature than I have in years. You can draw a few trendlines here and there, but you will never get a macro view like this. Hundreds of lines drawn for thousands of stocks. Start flipping and learning. So let's get back on track and talk about these "dead spots" where lines are of low quality appear. How will we address this issue?



Is relative strength good to trade? Of course. Can we apply it to every instance and make money? No. Then what is the determining factor? When is RS good and when should we avoid it? We do not use RS or any other indicator as our sole basis for entering a trade. We use other factors to filter out the best candidates. Heavy volume, technical breakouts... When we combine all of those other search variables with RS, we find fantastic candidates. The same concept applies to trendlines.

Are These Trendlines Algo Lines?

Not all of our trendlines are Algo Lines, but they include almost all Algo Lines. The same concept we discussed with relative strength (RS) is true of trendlines. Instead of altering rules to filter out trendlines that are drawn during a compression, we draw them anyway and we preserve really good trendlines that will generate great signals for other stocks. Then based on our searches, we will filter out Compression In or we will use other variables that tell us the stock is in a strong trend. Not all of these trendlines are Algos, but I

believe all of the Algos are here. We just have to find the best stocks, and then the trendlines will be valid and you will see the Algos. I believe this is also how institutions trade based on these trendlines.