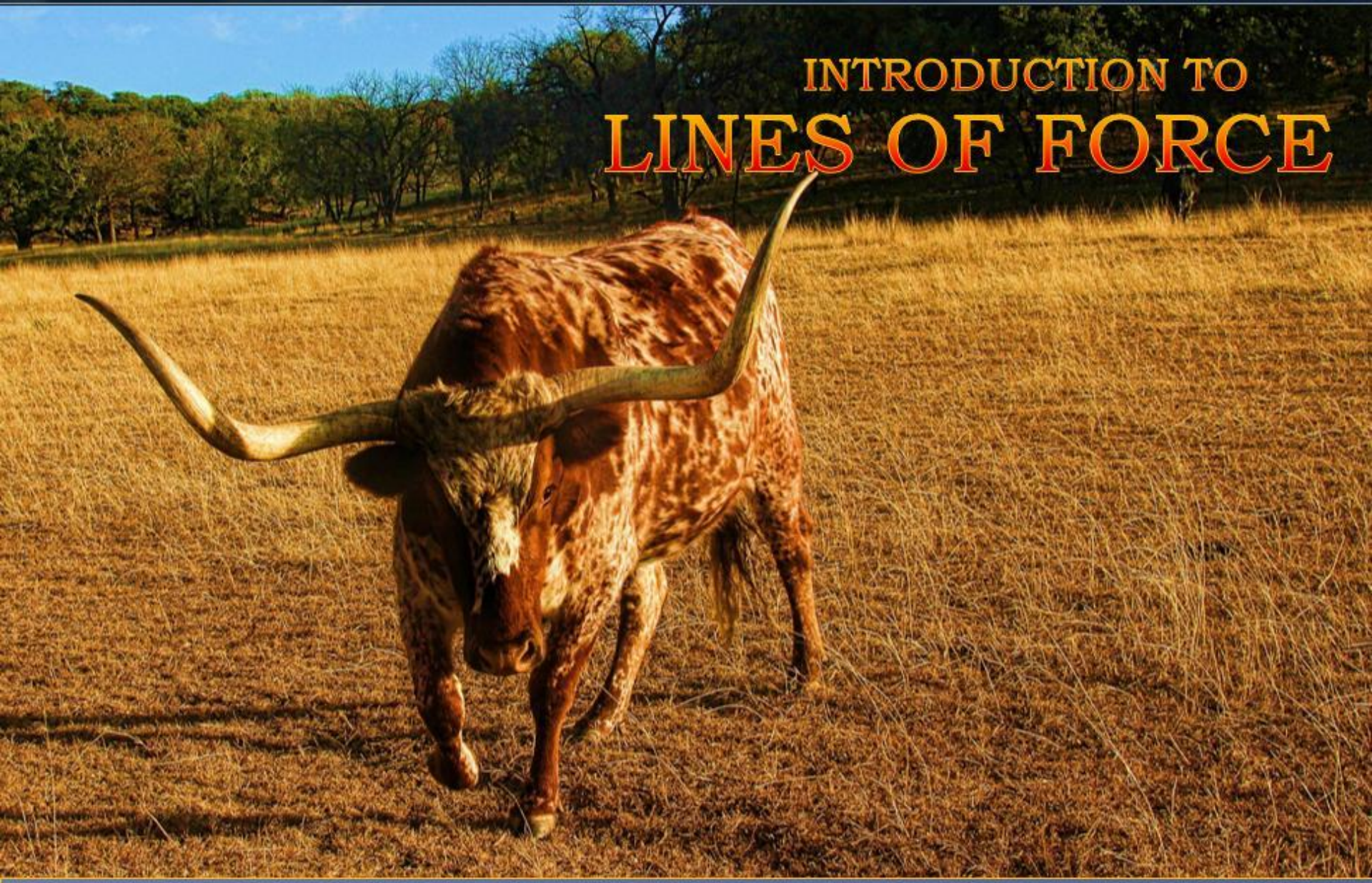


INTRODUCTION TO LINES OF FORCE

MODELING POST PEAK PRICE BEHAVIOR

Jon Knight

Acknowledgments

I must mention Howard Lindzon right up front. His website has for years displayed a simple message: *Trends. Find them. Ride them and get off.* That simple and humorous message was the impetus for my study of Lines of Force. So, thank you Howard. Without your wry sense of wit I would probably never have found this method, its artifacts, or written this small opus you are now staring at.

I also must mention Jesse, of Jesse's Café Americain. Your daily charts are unlike any I had seen, and it inspired my original work. Thank you.

My eternal fiancé, Trish – what can I say? You sweep away the things that make me less and you feed the things that make me more. Without you, I could accomplish nothing.

Elaine Larimer, you let me use this cover photo on a promise. Thank you. It is perfect. (Check her out HERE.)

Lynch and Wayne Seymour taught me to write, to act, to read, and to study with a critical mind. You put the path of discernment before me, and I have ever tried to remain upon it. Thank you for opening my eyes.

My sons, who outshine me in every way, have been a constant reminder that life is in the making of it, to be relished in every circumstance. Their very existence has been a driving force to publish this work. I will consider the effort a resounding success if it helps them in any way.

There are literally hundreds of people I have met on Stocktwits who have helped. It's impossible to name them all here, but they know who they are. Thank you, every one, for the questions, the comments, and the support while I've been working out this method of modeling forces. As I found myself being asked more and more complicated questions, I found I had to dig deeper into the method to find the answers. Thank you all for that, and more. This little book would not exist without you.

Kenneth Monville, wherever you are – you taught me precision, accuracy, and the difference between the two in scientific measurements. You were an uncompromising Standard, accepting nothing less from us than you were capable of yourself, and you were the best of us. Thank you for teaching me that integrity is the essence of everything.

I want to thank the progressive rock band Yes. Strangely enough, I am not certain this would have been written without their music creating an atmosphere for my work.

Of course, without the fiscal policies enabled by the Federal Reserve and advantaged by Congress over the past thirty years, none of this little book would have been possible or necessary. So thank you to a multi-decade trend of lower interest rates and increased credit, without which these huge peaks would not be possible, and a book modeling post peak behavior would likely be unnecessary.

For my sons.
May they recognize the forces creating the reality of their lives.

For my father.
You said I would, and I did. I wish you could've seen it.

And Especially For Trish.
Thank you for saving my life. Every time.

INTRODUCTION TO

LINES OF FORCE

Modeling Post-Peak Price Behavior

Jon Knight

When people say price has a memory what they are talking about is Lines of Force.
Price is an idiot with no brain at all, smacked around by every force it encounters.
Indeed, without these forces Price would not exist at all.

What's In This Book, And Where

Use your PDF Reader Bookmarks to go instantly from one page to another.

Concepts

The Quantum View

According to our current understanding everything that exists in the universe can be understood as either mass or energy. What mass does in this universe is wholly dependent upon what forces act on it at any given time.

One example is the element carbon. Carbon can be coal or a diamond, or many other things. I'll refrain from insulting your intelligence any further. A little thinking allows you to come up with your own examples.

Now if we get down a little deeper into reality, into the places where theoretical physicists like to hang out, we discover an interesting branch of quantum theory dealing with exactly how these energies and masses are related.

Apparently, what we perceive as physical reality is actually the boundaries between different energies interacting with each other. A kind of 'foam' erupts along the boundaries and it is this foam that we perceive as having mass.

The Lines of Force method translates this theory to the stock chart. Price is the mass we are supplied with. Our job is to find the interacting forces that create the mass.

It is important to remember that we will be finding lines of turbulence between forces, and not trying to predict future price action. Just like all valid forces in the universe these forces will be true across the entire model.

And just like in the real universe, a force may be strong in some places and seem weak in others. Price is indeed the object we are interested in, but like any object it will follow the easiest path offered.

Different forces are in control at different times across the model. Price has no mind of its own. It always responds to the strongest force.

We use the daily price prints: Open, Close, High and Low and find relationships between those data points to discover the lines of turbulence between the forces playing out across the model.

Those lines we plot on the model to expose trading channels, probable support and resistance levels, and other artifacts that will help us make better trading decisions.

It is also important to note that this method does not care at all what those forces might be. It is enough to know they are there. It can be rumor. It can be real news. It can be sudden unexpected dilution.

This method does not care. It recognizes that the true machinations behind the scenes may never be known publicly, and exposes the folly of thinking that it matters.

Price is like a rudderless ship, immediately responding to every force it encounters.

The forces become apparent through the four data points of Price, so it is especially important that only those data points be used.

Never try to infer derivative knowledge or knowledge of fundamentals to the model. Using this method requires that you ignore everything else you think you know about the stock and the company it represents while creating the model.

This doesn't mean I am recommending trading based only on the model. That would be foolish to do and I would never tell you to do that.

But ***while you are drawing the model***, you must ignore everything except the raw data of Price. You cannot afford to let what you think you know influence where you find your lines of force.

Draw them true to the price points. Don't approximate. Feel free to draw as many lines as you need to verify your model, and feel free to delete every line that is not perfect or useful.

Once your lines are drawn true to the model, then you can use it along with everything else you know to make the proper trading decisions.

The Good Sailor

The Lines of Force method is like the wind. It can fill your sails and speed you along or it can whip the sea into a frothy frenzy all around you. The good sailor takes a panoramic view. He may not know what will happen tomorrow but he knows what could, and he is prepared for it.

The mistake most people make is trying to predict the future using data like these models. Data can only explain up to the now, at best. It has no bearing whatsoever on the future. What these lines of force show us is not the future. They simply show the forces which could affect that future.

If we can understand these forces and how they might interact over time, then we have a clearer understanding of our risk in that future, and can plan accordingly.

The Classical View

From Newton's Three Laws of Motion we learn :

1. An object at rest will remain at rest unless acted on by an unbalanced force. An object in motion continues in motion with the same speed and in the same direction unless acted upon by an unbalanced force.

2. Acceleration is produced when a force acts on an object causing a change in either its direction or its speed or both. The greater the mass (of the object being accelerated) the greater the amount of force needed (to accelerate the object).

3. For every action there is an equal and opposite reaction.

Applying the underlying concepts to price movement, we can formulate these general rules:

1. When trading stocks the object we are talking about is the price per share. Without an unbalanced outside force acting on it, price will stay the same. Only when the sum total force becomes unbalanced will the price move up or down. Once it begins to move in either direction the natural tendency is to continue on that path until another force intervenes.

2. When the price moves up or down, this is acceleration. Price can accelerate downward or upward depending on the sum total force acting on it. It will continue to accelerate until acted on by another force. Forces may add to or subtract from each other.

3. Every time a force acts on the price, price acts on the force. This is saying simply that forces erode as they interact with the price. To move the price requires the force to impart some of its energy to the price each time it moves, so forces naturally become weaker, provided that they interact with the price. Without interaction the force can sit for years without losing much of its power over price if and when they do eventually interact.

The classical view takes us back into the realm of what we can really see, back into the physical universe. It can be argued that what we are talking about here is something that is NOT inherently physical.

I agree, with the caveat that it acts like a physical object well enough to be treated as such within our models.

Price is an abstract, a value assigned to an object but not the object itself. In our case the object is the stock float for a given company. That is also somewhat intangible, representing in turn the company itself, which hopefully is tangible. I believe raw price data reflects that tangible company well enough to be treated as the company itself.

Price is nothing more than some numbers assigned as a value at any given instant in time, which represents that company on the model. But as the company performs for better or worse the numbers go up or down, each representing real forces playing out in the real world.

Company does well: more jobs somewhere, more people eat better and the price goes up. Company does poorly and folks become worried about how they're going to get that next proverbial 'GI Joe with the kung-fu grip'.

These are real things happening to real people. Price is a measurement of those things. As a proxy for the physical world in a (somewhat) capitalist society, it not only can't be beat, it's also all we've got that's directly tied to reality.

Every technical indicator you can think of is a derivative of something else. Price is raw. It's hard to hide. And it doesn't take a doctorate to really understand.

It's important to note again here that for our purposes, we don't care what causes these forces.

It could be that some fundamental change has occurred or it could be the rumor of change. It does not matter. You can drive yourself insane trying to understand why price does what it does.

What does matter is that we see these forces and understand how strong they are. Then, regardless of what price does, we'll at least understand how the forces might affect it. The 'Why' is best left to folks who call themselves analysts.

Remember, we aren't analyzing a stock. We are modeling lines of force. Always remember that and your models will be more accurate.

Modeling lines of force requires that we ignore everything else. You cannot take short cuts because there are none. As soon as you move away from using raw data you are not modeling lines of force anymore, but are working with some derivative and your models will not show true lines of force. Use only your eyes and brain.

Once your model is drawn, then you must consider all the other things. The fundamentals of the company's operation, the technical indicators such as volume, RSI, MACD, or whatever you feel comfortable using. Using all that derivative information along with the lines of force you see on your model, you will have a generally good idea which direction your stock might head.

Modeling Forces, Not Prices

When modeling lines of force it is important to always remember that ***there are only two kinds of forces: upward forces and downward forces***. There are no diagonal forces, or any forces in any other direction you can come up with. It really is that simple.

None of your lines of force will appear in a perfectly upward or downward direction on the model. Lines of force interact with each other over time, either adding to or subtracting from the overall upward or downward energies along developing lines of turbulence. These lines of turbulence are what we draw on our models.

We recognize these lines of turbulence in the way price reacts to them. Using data points of Open, Close, High and Low for each time period we can plot coincidental lines and expose where these turbulent areas reside on the model. The lines drawn must be precise to be accurate. There can be no 'fudge' area. ***The force line is either there or it is not there. There is no in between***.

Coincidental lines are just that. To the uninitiated, they look possibly random. It definitely **is** a coincidence that peaks and valleys appear to 'line up'. But that coincidental nature does not detract at all from the effectiveness of modeling lines of force. One coincidence is a fluke, two are interesting. Repeated regularly across time? Ignore it at your own risk.

We are using data points of price, but we are modeling the lines of turbulence between forces acting on the price. It does not matter at all what is the root cause of any, or all of these forces. We know that each one will be an upward force or a downward force and for our purposes, that is all that matters.

Rumors abound both bearish and bullish on every stock I have ever looked at. Insider sales. Illegal manipulation. Management can and/or cannot be trusted. Analysts suck. And don't get me started with HFT and legalized scamming in the market/casino.

All of it, ***everything is reflected in the stock price***. Those four data points tell us daily everything we need to know. If a new force appears, you can bet it will show up in the price data within moments of becoming known, or even suspected. We may not know it by its name, but we can point to it and know it exists in the way price reacts.

Always remember though, that it is not price itself we are modeling. We are finding the forces behind the price. Price is just the raw data we use to find those forces. It is totally possible to draw the model perfectly, finding all the major forces accurately, and still misinterpret the model.

Focus on the forces, not the prices.

Lines of Force - Support or Resistance?

Lines of force are not inherently 'support' or 'resistance', but neither are they not. They are simply lines of turbulence between forces. Approached from below they are nearly always 'resistance' while approached from above they are nearly always 'support'.

The easy to remember exception here is that certain artifacts are associated with specific forces. The Fall Line is always a downward force, for instance. But these exceptions are few and far between. Just keep in mind that ***unless you're right under the peak most lines will be neutral, providing support from above and resistance from below***.

Remember that these lines of force are showing that thin area where price moves might be supported or resisted. This is the line where the upward and downward forces meet. It has nothing to do with price at all. Price is just along for the ride.

When people say price has a memory what they are talking about are lines of force. Price is an idiot with no brain at all, smacked around by every force it encounters. Indeed, without these forces Price would not exist at all.

What Is The Wind, Anyway?

At first I had some trouble with the idea of not knowing what causes these forces we're modeling. I found it might be helpful to think of these lines of force as showing some of the standard technical indicators that I was already familiar with, just within a different context.

For all we know our lines are revealing exactly that. They could represent RSI, MACD, so-called BIAS and maybe even CCI. I see some correlations between the models and these indicators, in when and how strong Fast Tracks and other forces appear and disappear.

Perhaps one day someone will tackle that question and find out exactly what relationship, if any, exists. If not, I suppose I will as time permits.

Meanwhile I will trust that whether or not I know the name of the hurricane, I will at least know to get out of its path.

Why So Many Lines?

The short answer is that ***without them we would have no idea how to interpret the model***. Parallel lines of force showing themselves in price movement represent the importance of the underlying force. The more parallel lines fit the model perfectly, the more relevant is the force those lines represent. The catch here is simple: they must fit perfectly.

Properly drawn lines of force also reveal the artifacts that we'll use to interpret the finished model and time our trades. We need our lines to reveal these artifacts, and sometimes that adds up to quite a lot of lines.

Humans are remarkably adept at finding patterns in apparent chaos. We love it so much in fact that even if no pattern exists, we'll create one to suit our preconceptions. We look at clouds and see just about anything imaginable. We look at the stars and see animals, inanimate objects and mythical creatures. We toast our bread and see religious symbols. And at some level we believe what we are seeing is real. After all, there it is. You can point to it. How could anyone dispute it?

When we start out drawing our model, there is only the raw data of price over time. We could draw a line from every data point to every data point and every line would be true. That is, each line would show a real relationship between prices. A model like this would have all the information we need and it would be totally useless, serving only to add to the confusion.

Not every relationship is important to our purpose for the model, which is to understand the forces behind price movements well enough to hopefully make better trading decisions. We need a way to know which lines are important and which are just noise, and we need it to be accurate every single time.

There is a real temptation to plot the lines we want to see, but it is possible to find the real lines. To do this we need to think about what it is we think we're doing here. It's all good and well to talk about price so much, and it's price we're interested in, but it's not price we're actually looking for. In a sense, price is nothing more than another artifact of the model, created by the upward and downward forces battling against each other.

So ***we are looking for the battle lines between forces***. Another way of saying the same thing is we are looking for the energies, both downward and upward, that push the price along from day to day. Since energy can never be created or destroyed it must be present and active across the entire model.

Valid lines of force are active across the model. Very long-term forces exist from the IPO onward. Peak resistance from years past is still active as a force today. It's not uncommon to plot lines that span a decade or more. If the stock is around in twenty years I wouldn't be surprised to see these same forces playing out on the model at whatever levels it trades then.

Valid lines of force almost always have reflection lines of force that appear parallel to the original line. Some of these parallel lines create channels. Some of these parallel lines act as resistance in an uptrend, or support in a downtrend. The older lines seem to appear out of nowhere if you're not looking for them, and have been the cause of many lost trades by investors who had no idea that time was such a transcendent thing.

The lines we are talking about here are permanent lines. These forces are there for so long that we forget them until they make themselves known. It is possible to get to a point in time where these forces have little or no effect, but it takes a very long time.

A good example of price being controlled by very long term forces is CSCO. The 2014 the weekly chart shows this stock is still firmly in the grip of peak resistance from its high in 2000. That's over a decade of influence.

Permanent lines are lines of force that are like the main currents of the stream that move price over time. Temporary lines on the other hand, are like eddies in the stream, active only over a short term but still reflective over the whole.

Local peak resistance lines, control lines, fall lines; they are all temporary in nature. Reflections from these lines exist only over a short time frame of months at best. Many times these lines are reflections of permanent lines.

Today's local peak resistance is tomorrow's past. A new one will be found eventually, even if it takes months. Ditto for local control lines, or any other local line. (A local line is one which is recent in time and currently active.)

But valid lines of force are active across the entire model. Yes, they are. Temporary lines of force do not disappear; they simply become superseded and so, less important for the time being. But I have seen control lines superseded only to exert their force later and become control again. I have seen superseded control lines' reflections become new control lines in their own right.

Temporary lines do not disappear. You could say they are "temporarily less important at times".

As you see, permanent lines of force give a longer-term view of the price and temporary lines of force show a more immediate view. When used together you can show long term, medium term and short-term trends, as well as probable highs and lows over very short time frames.

In short, there are so many lines because without them, we don't really have enough information.

We must always remember: We are modeling lines of force, and not price. We discover the lines of force by examining price and price movement over time. There is a difference, and you may need to remind yourself from time to time what it is exactly that you are trying to accomplish with these models.

Drawing Accurate Lines of Force

The first thing you'll want to do is take a look at the price over a very long time frame. I usually start with at least ten years of price on the screen if available. If there hasn't been ten years of history yet, then I start with the IPO. We're not drawing any lines yet - we just want to get a good idea how the price has acted over a long period.

In almost every stock you should see a decline somewhere around 2008-2009, sometimes a very steep decline. (With some of them you will see the biggest drop in the 2000-2001 timeframe.) When I am looking at any particular model, I am trying to get in my mind a reasonable understanding of how price acted prior to this drop. I seldom draw any lines here. I just look.

Next, we want to take a look at the price action for about the past five years. Here I may make a couple of tentative lines. I might draw in a few peak resistance lines from the pre-crash peak though the post crash peaks. If there is any indication that a long-term control line exists I might draw it and look to see if it's having any effect over that time frame. I might draw several lines of different types, the way a little boy might poke at something with a stick, just to see if anything happens.

And then I will most likely delete every line I have just drawn. It's still too soon to think we know enough about the forces on this model to believe we can pinpoint them.

The only lines that might make it through to the final model might be a strong and obvious long-term support baseline, a very long term peak resistance line through the last peak on the model, and peak channel lines (reflections) if any exist over such a long time frame.

What I am looking for in this stage are ***very long term forces that carry over from pre-crash to post-peak***. Any other force here might be superfluous.

Once we're done with that view, we're going to do the obvious and look at just a couple of years of price action. This is where we'll start looking for our current trading channels, control lines, peaks, reflections and other artifacts that map the price movements.

Over a two-year time span you should be able to find every currently effective line of force. Start with that long-term support baseline from the five-year view.

Duplicate it and move it around on the model to see if that force is reflected above in the price action. Chances are very good that you will find at least one or two other places it fits easily.

Go ahead and put these reflection lines where you see them, paying attention to detail, making certain each line fits exactly. You will be relying on your model to be drawn to perfection, so take your time. Work carefully.

So now we've got our long-term force lines drawn. We'll commonly call these "support" lines, but they are simply lines of turbulence between upward and downward forces. They will act as resistance from below and support from above. But for convenience, we'll call them "support lines".

Now look at your model. There are places there where some of your lows or highs along the way didn't fit with that long-term support line. Something must be responsible for those points in the data. After all, something stopped a rise, or something stopped a fall. To believe otherwise is to believe the market is random in its entirety. If you think that way, then stop right here. This book will not help you.

Back to the model:

If we draw a line from one of those lows to another of those lows, and then continue to extend the line across the model, does it look like it makes sense? Is there a pattern to be seen in the interim peaks and valleys? Try a couple of lines on several different price points and see if there's anything there. If there is, leave it. If there is nothing, delete that line and try again.

Once you find a line that might make sense, duplicate it and try to find another place where price follows the slope of the line perfectly. There is no margin for error here. It either fits or it doesn't. There is no maybe.

Remember that valid lines of force are active across the entire model. What this means is that a line of force can have an effect in the past, then be superseded by other lines of force, then affect the price again, then be overcome again, and then exert control again and so on. The line of force is there, always.

All you need to have a valid line of force is to see that line hit two price points, perfectly. ***Major lines of force will hit multiple points, perfectly. There is no fudge factor here.*** The standard is one hundred percent accuracy, and to achieve anything close to that we need perfect accuracy and precision when drawing our lines.

You may see a line fit over on the left side of your model but seems to do nothing on the right. That's a valid line, although lately it might not seem important. Place it where it fits and duplicate it. Take its duplicate around the model and look for validation. Many times the duplicate will look active on the opposite side of the model either higher or lower.

Remember, we are modeling forces acting on price, not the price itself.

Continue looking for these lines until you've drawn the obvious ones. You'll draw them in sets of reflected, parallel lines of force if you've drawn them correctly. You should have at least one downward set of forces and a couple of upward sets.

You should see trading channels formed by connecting the peaks and valleys in at least one area of the model. You may see more than one trading channel, and those not looking at all alike. ***Each channel is valid and you should draw it in***. Look around the model for other signs of those channels. What you're seeing is simply very strong lines of force moving the price along, oscillating like electricity.

Imagine that each of these lines of force are the flux lines of a field. Remember seeing those magnets with the metal shavings? The shavings would align themselves along lines of force as the magnet dictated. They were incapable of doing anything else. Price acts exactly as the metal shavings, appearing to manifest itself along lines of force.

Before we go on to a shorter time frame we want to make certain we draw one more line.

There is a peak on this model somewhere. If it happened a few years ago then there will be a couple of smaller peaks following it. We want to go ahead and draw a peak resistance line from that tallest peak through the next peak and on to the support baseline. If there are more peaks after that, we also want a line from the tallest peak through the latest peak.

Now, before we move on, let's look at what we should have on our model.

There is the long-term support baseline. There are the incidental trading channels along the peaks and valleys. There are several sets of upward and downward forces. And there are the peak resistance lines.

Now we can move on to the short term time frame, anything from a year to a few months or even weeks, if need be. I like to jump down to about six-to-twelve months and look around for special artifacts such as control lines or fast tracks. By now I have the major upward and downward forces plotted out on the model. This is where I look for the details.

Look for more of the same sorts of patterns you saw in the previous views. We're still looking for forces, but now we are looking for them up close. If you wanted to do it, you could plot probable lines of force for every single day (I've done it, just to see) but there becomes a limit to how many lines even the author of a model will tolerate.

What we're doing here in this view is verifying close-up how accurate our lines are. We want to see multiple ***exact hits*** on these lines from one day to the next.

But we don't have to put every single line on the model to do that. When you start here, you already have the major lines. Look for reflected lines parallel to those majors to find the minor lines that are important.

Duplicate the major line and try it out around the model. Where it fits, leave it for now. If the model gets too cluttered you can delete these minor lines later. Right now we are still verifying the lines and their relative strengths across the model.

I usually make these minor lines as thin a line as I can within the program I am using. This helps to remind me that they are minor lines at this point in time. Remember, these are lines of force, and this line may take control of price at a later time. If it does, then at that time the line becomes bolder while it exerts control.

If you have a major line and you cannot find any minor line that works with it, there is a perfect chance your major line is not quite right. Every major line will reflect somewhere within the price movements. If it doesn't on your model, better double-check the original line.

I am often asked what programs I use to create my models. I use Scottrade Elite to get the raw data and draw most lines. I use Microsoft Paint to add notations and colorize. I chose these because they are free.

If you trade online, your service should provide a charting app free to use. Both MS and Apple provide free drawing tools.

Reflections on How Reality Is Made

Forces are not physical. They are energy, and all energies exist in a wave form. All energetic waveforms also produce harmonics. Reflections reveal the most turbulent of these harmonics.

These forces are not filling up the empty space of the chart as much as they are creating the fabric of the chart itself. Without conflicting forces, there would literally be no price whatsoever, and therefore no chart to examine.

These forces are very real, and as they interact they create the price we see. Imagine no downward forces: price would rise to infinity which would mean you could never sell as no one has that money. End result? Stock is worthless as it cannot be traded. No upward forces? Same result. Worthless stock.

The only reason price exists is because upward and downward forces are in constant conflict. In any system of conflict, lines of turbulence emerge, battle lines between disparate forces. Without this constant conflict, systems such as these lack balance and will eventually fail. If you're long, thank a short.

Clarifying The Model

Clarifying which lines of force are important requires us to check each line in various places across the model's history. Doing this is easy.

Allow me to start from the beginning, even though it may seem a bit repetitive. I'm doing that on purpose here, because these are the most important steps to creating your best model possible.

Draw the line you see that looks important. A good line to draw initially is from the point where the stock started to really take off from its normal trend through the low where the stock bottoms first after the peak.

Draw the line considerably through the low, longer than it needs to be.

Now duplicate that line and place it at different places on your model. Try it along the highs leading to the peak. Try it anywhere it looks like it might fit.

By fit, I mean ***this line needs to exactly touch at least two, and preferably more price points such as interim dips or peaks***, or follow a price progression for several days extremely closely. Hitting more than two peaks or dips perfectly presents a stronger proof for the line.

To be completely validated the line must have a reflection fit perfectly somewhere else, either along highs, lows or opens and closes.

If it's close-but-no-cigar, keep looking or make sure your original line is exactly on the points you want. If you find a place it fits, drop it there and get another duplicate. Find another place it fits. Drop that parallel line everywhere you see it fit. These lines are reflection lines and they do carry force.

After you have several lines, each parallel and all fitting exactly, you have drawn true lines of force. Each of these lines reveals the boundary area where upward and downward forces interact with the most ferocity. It is this interaction that creates the price we see.

With the exception of peak resistance and control lines, all lines are drawn using this simple method. There is no secret to it. If you have eyes and a human brain you can see the invisible lines connecting price extremes. ***Highs and Lows may be connected together.***

Find Lows and Highs of trends and plot lines between them. Clone them and test them around the model to see how strong they are. If they're strong enough then leave them on the model, including their reflections. Those reflections are valid lines of force in their own right and shouldn't be removed from the model.

You may see highs and lows along the same line. This is in fact is a great validation for any line you find. Lines of Force always serve as both support AND resistance.

Do this for both the uptrend and downtrend lines of force. Connect highs with highs and lows with lows, or highs with lows and lows with highs. Opens and Closes may also be used. Sometimes the lines are more accurate going from open to open or close to close. ***Keep in mind we are plotting lines of force; Highs do not always need to connect to other highs. What is important is capturing the thrust of the force, wherever and however it appears***.

Make as many lines as you see valid relationships between prices, focusing on the four points of a daily price print: highs, lows, opens, closes. For each set of lines, use a different color to make it easier to see the relationships between the forces.

Don't worry that your model is starting to look like a laser light show. If the forces are there you want to see them. This is how you do.

Once you have all your lines you should have a pretty mess. Now it's time to clean it up so it makes some sense. Examine your lines. You'll have some that are dead on the money right with lots of reflections, all of them perfect. Those are keepers, every one, every reflection.

Then you'll have some that are really, really close and look like something you would like to see anyway. They're only slightly off and charting isn't very exact, and besides, that's where you were hoping there'd be a line anyway… well, you gotta ask yourself: is that line real? If the answer is "I don't know", then delete that line and all its reflections.

Lines of force either exist or they do not. If they do, they care not one bit what we hope they do. Our only hope is to recognize them and either get out of their way or use them to get us where we want to be.

So if you have doubts about a line you drew, delete it. If it keeps appearing then add it back but find out why you think it's so important. Don't think it's there. Know it is.

Once you've gotten rid of the unnecessary lines you will probably still have lines showing several uptrend forces and at least a couple of downward forces acting on the price. You should be able to see channels created by these parallel lines of force where the price rises to a line and declines to a line over time.

Each set of parallel lines shows a potential channel for trading the stock. On rises and declines, these lines also show probable lines of resistance and support.

As time passes the price may move from one channel to the next or across several channels at once. You will want to know how many channels are crossed if this happens, as this is a clue to the strength of the forces behind the move as well as indicate possible tops or bottoms.

This is a good place to talk about colors. As I use them, generally reddish colors are downward forces and generally green or blue colors are upward forces. I try to reserve black or gray colors for stronger forces such as control lines and fall channels.

A thicker line usually shows a currently stronger force than a thinner line of the same color, but might show instead top and bottom rails of trend channels.

Each model is a work in itself and I might stray from these guidelines a bit, but I usually try to adhere to some logic within each model.

Where there are simply too many lines to allow a proper focus I will colorize channels that seem important to the price movement. Coloring channels helps others see the forces you are showing and how they affect the price movement, as well as helping you to clarify your thinking.

It takes a bit of time to do but sometimes your understanding of the model can change just by coloring between the right lines.

Don't just arbitrarily pick the lines that make you feel good. Remember, your finished model should last you a long time with only minor tweaks. The colors become part of the model. You must choose what and where to fill in with the same attention you used drawing your lines.

If you're long, don't give in to the temptation of only focusing on the uptrends. Especially if you are long, focus on the downtrends. Find the correct artifacts.

Then color what you see, not what you expect. A properly completed model will not predict the future. Not even one day ahead. That at times it seems to do so is an illusion created by your own confirmation bias.

What it does do is provide a model and a set of rules that works amazingly well when used together. For instance, consider this:

When price exits a Fall Channel we would expect it to rise. And it many cases it does rise. We see it happen all the time. We also see that in many cases after an initial fall from a peak, a recovery is not sustained and price quickly resumes its fall.

We have an artifact called the Fall Channel Control Line which predicts with amazing accuracy when and where price will exit a Fall Channel. But it says nothing about where price is heading once it does. It gives us a reasonable timing mechanism, but no guidance on how to profit from its use. That part is our judgment call.

But we remember the price rising after it exits the fall channel, which it does in almost every case even if only for a few days. So we have the tendency to combine our bias with our expectations. That could be a costly trait.

Uncertainty

Take a moment and think about something with me. You want to model lines of force so that you will understand a little more about how a stock's price might move from day to day or week to week or whatever. You want an idea as to what it might do.

Right there is our first piece of uncertainty and we'd better just accept it. Nobody can foretell the future, as far as I know. Models will only give us information on the price movements up until the moment we grab the data. ***The best we can ever hope to understand is NOW***. Tomorrow is always a gamble.

We can only ever hope to understand how we got to where we are. We are not driving this bus. We are passengers and all we want to know is when is a good time to get on or off. We want a schedule. Modeling lines of force is about as close to that as I can find. But the lines must be accurate.

There is no substitute.

So recognize that there is always uncertainty in our work. The best we can do there is to simply try to mitigate it. Draw our lines carefully and without bias. We cannot afford to let our hopes or our fears affect the lines we draw on our models. We need to know the truth of it, and yes, we can handle it.

What we cannot handle is losing money time after time because we didn't have any grasp on what price might do, *and no idea of what it could.*

Draw honest lines and make them true. If you settle for approximate lines then you will get approximate results, which is to say, not the results you are hoping for. You may draw a support line that makes you feel good but then when price dips below it you sell to avoid further losses, only to see the stock rise for the next few weeks to what might have been a handsome little profit for you.

If only you had drawn honest, and accurate lines.

Artifacts

Channels and Wedges

The basic artifact created when drawing lines of force are **Channels**. Almost everybody who has ever dabbled with charting price is familiar with the concept of channels. You draw a line across the peaks and a line across the valleys and there you have it. That is, if you're charting prices.

It doesn't work quite that way when modeling the forces driving those peaks and valleys. The difference may not seem apparent at first but it is there, and it is obvious and it is important to remember. We do not care if a line passes through a low, then a high, and back through another low again. That the points touch the line perfectly reveals the force behind the points.

Our channels are not drawn intentionally to corral price within the lines. Instead, the lines of force are drawn and channels simply appear. Remember, we are modeling forces and not charting prices. The difference between the two is crucial to understanding and using your model.

The lines we draw are neither support nor resistance. They are both, depending from which direction they are approached. They are lines, of force, and may support or resist price movement in either direction.

Another difference is that we will probably show more than one channel and those channels will intersect each other in ways that look, to put it simply (as have so many before) like a laser show.

Properly interpreting a model requires that all the major forces be identified so the artifacts can be resolved correctly.

A completed, clarified model using lines of force will show at least two downward channels and at least two upward channels, sometimes more.

Once price establishes itself within a channel it will remain in that channel until a stronger outside force acts on the price moving it out of the channel.

Wedges occur where channels collide. You might find it helpful to think of them as trading wedges, meaning price will usually oscillate through the wedge hitting its top rail and bottom rail before being able to move up or down significantly beyond those limits.

A wedge is akin to a trap. Once price enters the wedge there is usually only one way out - trade across the wedge.

I have seen price jump onto the top rail as if it were going to break away from the wedge, only to ride that rail down to the point at the end.

I have also seen price jump out of a wedge in both directions unexpectedly. Wedges can at times be very unreliable, but I never ignore them. I always expect them to confine price to their area until price plays through, especially if that analysis is supported by other artifacts.

Fast Tracks

Fast Tracks are not true channels, although at times you may be tempted to believe they are. What a Fast Track actually does is provide a quick release mechanism for strong and sudden upward forces.

Sometimes these Fast Track forces are extremely powerful and last for weeks or even months. It looks like an extremely steep channel and after a couple of weeks you will be inclined to think of it as a channel. You will think you see an obvious baseline, an obvious midline and an obvious top rail.

Phantoms, I tell you. Don't believe it. If you ever see a Fast Track take price on a ride like this, parabolic for weeks on end, then look back over the very long term. Look back five, ten, even twenty years at the price action.

Chances are great that you will see over the very long term, that price has traded in a very wide channel and this current Fast Track is simply taking you to the top rail very quickly.

That is what Fast Tracks do. They provide a path upward across trading channels, but they are not really channels themselves. They may appear and disappear without warning.

You may be tempted to think of them as Channels. Every time you are tempted, come back here and read this.

Fast Tracks are the inverse of a local control line. We find them by the same methods, except we apply those methods to the Lows instead of Highs. When price stops rising through a Fast Track, it is usually because of a control line intersecting the track.

In the absence of a ruling control line the fast track will continue to take price higher until it reaches the peak rail of the current trading channel. This could take days or weeks, months or years.

Particularly strong Fast Tracks will rise daily, as if they are levitated by magic. In most uncontested Fast Tracks there will be periodic corrections which accomplish little more than time-shifting the gains a week or more, then rising along a parallel track.

Once the previous peak is left behind and below, a strong track like this will allow no time for new control lines to form. Peak resistance will become a thing of the past. Few artifacts will appear in the short term model and for any usefulness to come from your model you will absolutely need to look at it very long term.

Find that very long term channel that this monster Fast Track is leading you toward and prepare to jump off the bus. Trust me, when the turn comes, the bus will not stop for you to get off.

Peak Resistance

When modeling lines of force one of the strongest you will encounter is the downward force of a peak in price. If the peak is the result of a blow-off type of rise, very parabolic in nature, that force at the peak is nearly one hundred percent downward at a ninety-degree angle to the time axis. Lets examine what happens.

Price climbs as the upward forces powering it combine into one overwhelming force that rises past immediate resistive forces. As this upward force builds, price runs faster and faster upward until it finally is moving nearly straight up on a daily chart. Apparently nothing can stop its rise to infinity.

Nothing needs to stop it. Like every force in nature that we can measure, this one is only so strong and no stronger. The force interacts with price and if price responds, some small energy of the force is imparted to the price. Eventually the force has imparted all its energy to price and it will stop of its own accord, regardless of whether there is any other force acting on it.

There is no further upward force. ***In the absence of upward force, all remaining forces are negative***. Price is sitting way up there on the peak of this enormous force that it has stretched out across levels until all the force is played out underneath.

It would continue to go higher but it has taken those little pieces of energy from the force at each step along the way to get to where it is, which now is on a precipice. There is no more upward force left and so price must either remain where it is, or it must drop.

It must drop and here is why. If it doesn't, nobody wins. Longs don't win. Shorts don't win. Market makers don't win. And if nobody wins the game, nobody plays. Game Over.

So price goes down, and it goes down hard. Everywhere it can, it stops to grab some of that upward energy it left behind on its rise. Quickly it returns to where there are a jumble of forces and it grabs energy from those as well.

Price will fall through a channel, independent of all other distinct forces on the model, until it finds an upward force to support it. There it rebounds a short time.

Every stock that reaches a parabolic peak will react this way and from the standpoint of lines of force, this is as good an explanation as any.

What is really important about the peak phenomenon is that it creates a force of its own, independent of all other forces.

After a parabolic peak like the one described above there are usually a series of rises and falls I call ringing. After the price exits the Fall Channel, you will see price attempt to rise again, setting new highs on consecutive days. But the run is short lived, and several days after it starts it turns south with a red candle. This is the beginning of the ringing phase. As soon as the first one appears, peaks, and begins to fall again, you can draw your first peak resistance line.

Do it as the name implies. Draw a line from the parabolic peak through the latest shorter peak and onward to the support baseline found with your Fall Channel Control Line. That is your first peak resistance line. ***Price will almost always follow it toward the baseline support before turning and heading back up.***

After price finds the support baseline it will turn and head up again until it reaches a point somewhat below the last peak, and then it will turn south again. Now you can draw your second peak resistance line. Draw it from the parabolic peak through this latest smaller peak and on toward the support baseline.

Each time price peaks you can draw a new peak resistance line. After the second one you will want to draw a line across the highs and lows of each cycle to see if there is a line of force appearing there.

If one appears along the lows you can use it as your support baseline for the peak resistance, but don't ignore the real support baseline.

As price moves further away in time from the parabolic peak, the new peak resistance lines lose some of their force and control lines become very strong. But I have seen many peak resistance lines exert themselves over time spans of years, so don't ever count them out.

The Past As Prologue

Force are active across the entire model, from the IPO onward to today. Those same forces that appeared on the first day of trading are still there. For older companies, the forces from decades ago are still playing out across the model and will continue to do so.

But there are two aberrations in the data you need to always remember to examine. Never forget the crashes from 2001 and 2008. Intentionally look for the effect those time periods had on your model.

Those are Peaks. This little book is about Post-Peak. Keep that in mind as you are working on your models. Apply the concepts here to the long term model as well as the short term model. Don't get caught by surprise.

The Fall Channel

Once price has reached the pinnacle of a parabolic peak, it will fall until it finds a force strong enough to stop the fall. Nothing travels in a straight line when multiple forces act upon it, so price falls over time in fits and spurts. This time could last for days, weeks, or months. As price falls and rises, falls and rises, each time setting lower lows and lower highs, a channel is formed which we call the ***Fall Channel***.

Recognizing the Fall Channel is sometimes not as easy as you would think. There are several ways to find the correct lines, and on some stocks you might have to try every one of them to find the final model. Like all lines of force, these lines should never be the result of a guess. It is hard to get the Fall Channel lines drawn with accuracy and precision, but it can be done with practice.

If your Fall Channel is drawn incorrectly, your Fall Channel CrossPeak Control Lines will expose it. Properly drawn Fall Channel lines can give you a good idea when trying to time expectations of a reversal after a parabolic peak and fall.

Note that I am not saying you can call a bottom with this artifact, but rather that you can estimate with some precision the probable exit of price from the parabolic blowoff. Price may rebound a short time and then resume its fall, or it might continue or begin a new uptrend. We do not know from the model which will happen.

You can never predict the future with any technique or method known. But the future and the past intersect in the present, and probabilities can be estimated. The Fall Channel ties the rise prior to the peak, the peak, and the post-peak fall, into a coherent whole artifact.

When you draw your Fall Channel you will use one of several methods. After the peak you will wait for price to decline until it finds support and trades generally sideways for several days, then falls suddenly.

The simplest Fall Channel line is drawn from the peak through sub-peak of this last day before the fall resumes. Extend that line all the way down to a major support line. Don't worry if that seems a long way to fall. Right now we don't have any clue how far down we're heading, so we just draw the line.

Now, duplicate that line and lay it just over the lowest low you see right after the peak. This is usually the day when price decided to stop falling and trade in that little sideways trek. Drop the line in its place and step back.

Right now, that is your Fall Channel. And it's doing you no good at all. We need to add the Fall Channel Control Line to learn anything from all this, so let's take a look at it.

To get some use out of the Fall Channel, we have to add one more line: the Fall Channel Control Line. There are actually two types of control lines that can appear with the Fall Channel. The Cross-Peak version has an origin before the peak, while the plain Fall Channel Control Line is strictly an internal affair, deriving all it's reference points from inside the channel.

You cannot draw either version of this line until price has dropped from that sub-peak we used to create the channel itself, and found its next support below. You'll see this because once again, price will begin to travel generally sideways or even up for a few days. Once we have this price point set, we can verify our channel and draw the control line.

Verify the channel by looking at where that second Low occurs in relationship to the left rail of the Fall Channel. It does not need to be perfect here – does it make any sense to you at all there when you look at the lines? If it doesn't then you may have to use a different method of creating the Fall Channel. We'll talk about that in a bit.

Let me explain why the lines don't absolutely have to be perfect at this point. It's the Fall Channel itself – it's still being created at this point and so it is impossible to accurately model the thing. We can only see it up to Now. But like so many other things, if we see enough of it, and we are familiar with the type of thing we're seeing, we can estimate the finished artifact.

Assuming your channel lines look good to you, we can move on and draw the CrossPeak version of the control line. Study the price movements leading up to the parabolic peak, paying attention in particular to the little smaller peaks along the final stages of the rise.

Find the first sub-peak prior to the top peak, one which has an obvious and easily discernable retreat to a distinct bottom, before price rises quickly to the very top. Sometimes this Low is on the day of, or the day before the peak.

That distinct bottom, the last Low before the final Peak, is where you begin drawing the CrossPeak Control Line.

You will draw it from that Low, through the exact point where the first fall after the peak touches the left rail of the Fall Channel. Sometimes you will use the Low from that day instead of the intersection of price at the left rail. You may want to try them both at first, to see which works. Continue the line all the way across the Fall Channel until it comes out the other side.

It should be obvious but I will state it plainly: the Low you choose in your Fall Channel must be lower in price that the originating point.

If the first available price point on your fall channel is higher than the originating Low prior to the peak, then move down to the next available point on the left rail and draw the line through it instead.

Of course, this may indicate your Fall Channel is drawn incorrectly, so check that if this happens to your model.

When the rules fail, always recheck the model. They're called rules for a reason, and though they do sometimes fail, it is rare. Always check for something you may have missed.

Alternative Fall Channel

Sometimes when you place your left rail line of the Fall Channel it just doesn't look right. Nothing really even comes close to fitting; none of the lows hit the line, or they pass through it like it wasn't even there in a random fashion that shows no pattern.

You may need to use the Alternative Fall Channel. You'll draw it almost exactly the same as the Simple Fall Channel. The difference is that this time we draw the left rail first.

In this alternate method you'll look for the second big drop after the peak. Draw a line from that Low through the Low of the drop above, and onward toward the top of the model. Then extend the line downward to the major support. Duplicate that line and place the top of it at the peak, letting it run down below to wherever it does.

This is your Fall Channel, Alternate method.

You add your control line exactly as before, starting from that last Low before the peak through the first low touching the left rail of the Fall Channel.

To be a valid Fall Channel, Price cannot trade entirely outside the channel on any given day before exiting the fall channel completely. Any day can trade outside the channel partially without invalidating the channel. This is one way of checking your lines as you create the model.

Most Fall Channels can be drawn using one of these two methods. As the channel evolves, you should begin to see that price seems to loosely follow your control line at times. If it doesn't, you need to recheck your control line. Price should follow it loosely for a couple of days any time it gets near as it drops through the channel.

You want to keep verifying this artifact because it is continually evolving as we are drawing it. Remember that this is the only evolving artifact we use. It can constantly change as it develops, and we need to stay on top of it.

Price will exit the Fall Channel at or near the intersection of the Fall Channel CrossPeak Control Line and the right rail of the Fall Channel.

Knowing where and when price will exit can give you an advantage. Caveat: do your due diligence.

Control Lines

Control lines are by far the most important lines on any model. They do exactly what their name implies – they control the movement of the price downward to the lower support rail.

If you can properly locate a control line, you can almost always know in advance the general direction a price will move over a short time frame. In many cases you know when and what level the price will stabilize or accelerate.

Properly locating a control line can be a tricky business. Many relationships will offer themselves as possible control lines and in fact there can be more than one control line appearing at any given time. Some control lines make themselves apparent quickly while others seem to hide in plain sight until they seize control.

In many cases there are no true control lines at all. As difficult as it is at first, identifying simple control lines is not impossible and can be mastered with practice.

First off, control lines as described here only appear after the stock has peaked. Some control lines will extend to a point before the peak, but you will never see one appear until after the peak.

Control lines guide price down after a peak to a support where the price may start a new uptrend, continue an old uptrend or move on to new lows.

A control line is seldom the same line as the peak resistance line. Peak resistance lines do act like control lines if a control line is not present but will defer to the control line whenever it is around.

Control lines always guide price to a support, where price must rise or fall. Combined with other diligent research, they can be used to precisely time buy orders near their current lows.

Control lines appear in several configurations.

Simple control lines are recognized across peaks of consecutive days.

Ringing control lines appear across the peaks of subsequent rises during the ringing phase after a peak.

Cross-peak control lines appear across both lows and highs of major short-term peaks and valleys immediately adjacent to the peak.

Sometimes you will see Fall Channel control lines, which can be especially useful playing the first bounce after the peak fall has concluded.

And finally the Control Eye line is the top line of a strong Eye of Sauron, which is itself a reflection of a past control line.

We'll examine them each, one at a time.

The **Simple Control Line** may appear on the day after the first sub-peak is set, after the initial drop from a parabolic rise in price. Start at the sub-peak and draw through the next lower daily peak out as far as it takes to reach an interim support line implied by the Fall Channel or one of the longer-term baselines. Usually you will draw your line through the Highs of each day.

This is your local control line. It will control price movements in a general way until price crosses it near the developing baseline. ***This gives us not only price objectives, but also a reasonably specific time frame for those objectives to be realized***.

Now you know that over that time frame price is going to have to overcome this line. Which is another way of saying that price will be constrained below this line unless price finds a stronger support line to follow that takes it across the control line.

What this means to us is that we know price will be taking a generally downward trek for some time, generally following the trend shown by the control line.

There is a caveat to drawing your first control line. If that second day's high is too much below the first day, the control line is too steep and may not be useful. Local Control lines only appear after the initial drop from the peak has concluded. Price may still follow this line, but the move will be dramatic and quick.

Price may or may not go down to the long-term support baseline. More likely is that an interim baseline will form along the troughs as the stock price rings several times after the original peak. You see these drawn on charts as the bottoms of triangles, or the bottoms of pennants after a peak. This is a force line and is fairly reliable to be the short-term bottom for each control line during the ringing stage.

You will easily recognize ringing after a peak in price. Price goes down from the peak, then up and then down, and then up and then down, and then up and then down. It will do this three to five times usually, and it is this that I call ringing. Anyone familiar with waveform analysis will recognize the term immediately.

The **Ringing Control Line**. Is drawn by connecting the peaks of each rise. To be a strong Ringing Control Line you should see a line that runs from the daily peak of the last ringing through the peak, open or close of the second ringing, which also clips the next daily high in each. You may see that the peaks match perfectly on each of the four adjacent days. If you see that, test it to see if you've discovered an Eye.

Remember that the definition of a control line is a line that guides price down after a rise in price, to a point where the stock can rally or drop. The lower rail of the ringing channel is a temporary artifact, serving only as a baseline support until the stock reaches its true support, leading always to either a rise above the Ringing Control Line or a drop below the lower rail to a new, lower support level. Ringing Channel Control Lines are valuable indicators of the probable length of the ringing phase.

Cross Peak Control Lines are sometimes the hardest to see, but are also among the strongest control lines you'll find. They appear as their name implies, drawn through (across) the parabolic peak. There's no hard and fast rule to these creatures. I usually find them by connecting a failed peak immediately preceding the absolute peak of the parabola, across the model and slightly downward through a tall wick (top or bottom) during the peak-fall phase, and continuing on through a tall wick immediately after the fall, on the stock's initial rise after the peak-fall. They also appear at times across the lows of these same days.

Control lines can be thought of as a particularly strong line of turbulence in the energies exerted by the upward and downward forces, where the end result over time is the equalization of those immediate forces at a pre-established price level.

I know that's a long sentence, but read it again, as slowly as you want…

The money is made at the margins. Buy low. There's a margin. Sell high. Another margin. ***A control line is a constant beating down of the profitability of trade in either direction until a proper resolution to the preceding peak is found.***

When a parabolic peak occurs it will always overshoot true value. And its fall will overshoot in the opposite direction. That sets up the ringing, allowing price to oscillate until it finds equilibrium again.

Only after the price has moved across the ringing phase can it move on up. Note that there is never a guarantee that the stock will continue to rise after the ringing phase. At the end of the last control line, it could fall.

In fact, ***there is no guarantee that the stock will even enter a ringing phase***. After exiting the Fall Channel it may continue to drop, creating an immediate Extended Fall Channel and possibly establishing a new downtrend channel. Or it may immediately rise to new highs.

Remember, Control Lines lead price down to an interim support line, and nothing more. Once price reaches its destination, it can tell you nothing about the future price. The profitable use of a control line requires a discerning view, knowing which support is the real one. A wisely chosen bottom is a guaranteed profit.

Fall Channel control lines are especially useful when trying to trade the initial bounce from a parabolic blow-off. True Fall Channel Control Lines will show traits of both the simple control lines and the peak-to-peak control line.

On the first peak you will draw your line through at least two daily highs and extend the line through the peak of the next rise, still within the fall channel. Extend that line on out to your support baseline.

Once price reaches and establishes the fall channel bottom, price could rise to meet this line and then turn down and follow it to the interim baseline. ***Remember that price can cross a control line to the upside and still be influenced by it.***

The control line guides price gently down, and sometimes allows more leeway than we would expect. Price can walk away and above the control line for a week or more, and still be drawn back down to follow its course.

The **Control Eye** is the strongest of all these lines. It is usually a reflection of a particularly strong control line appearing beneath the eye somewhere on the model. In a sense, it's not a true control line, as it shares none of the qualities of the other lines. It appears out of nowhere sometimes, a reflection of a control line below, and I include it with the control lines because of its power to reject price so strongly that price retreats toward baseline. Always expect the Control Eye to be the strongest force on your model whenever it is present.

Many times control lines will appear to be reflections of longer-term forces. If there is a particularly strong and long lasting force across your model, the control line might be drawn parallel to that force and in fact be a reflection of that force. In all cases except the Eye, those reflected lines will show exactly the scenarios described for each of the lines. If you see this you can consider it confirmation of the control line in most cases.

Also, ***very strong control lines can create their own reflections***, which can follow price even as it rises beyond the original control line. These control lines are usually one rail in the Eye, described in the next chapter.

Sometimes the control line doesn't appear on that second day. Sometimes you look and just don't see any force that appears to be in control. Sometimes it's because we're looking at the wrong time frame.

Try switching to the weekly view. Use the same technique as described for daily models. You may find that drawing the control line on this time frame, then switching to the daily, reveals a force that was there all along, hiding in plain view.

Now you know two things here, whether you know it or not. You know that ***price will generally be constrained to follow either the peak resistance line or your first control line to the bottom of the ringing channel, and you know that the ringing will consist of at least three cycles of declining returns.***

As each cycle repeats price will follow either the peak resistance line or the control line to the bottom of the ringing channel. The end of the ringing channel will generally coincide with the time where price crosses your final control line on a sustainable rise, which is usually on an upward long or medium term force line. Else the stock price tumbles like liquid being poured from a cup.

Trade accordingly.

Walking Into Mordor

Control lines arise from the coincidental indecision found at the tops of consecutive periods. The period can be a day, a week, a month or any calendar based measure, as long as it repeats regularly. The period can also be something not quite as temporal, such as the semi-regular rise and fall of the ringing channel, or consecutive parabolic peaks.

The Eye can be thought of as a very thick control line. Every Eye will have as at least one rail, a control line. Even the Peak Eye, which appears to emanate directly from the peak, will eventually form a control line as price tries to move above it.

Without Control Lines, the Lines of Force method would be nothing more than a mildly interesting academic exercise. Control lines give a general view, with a great degree of certainty, where price will be trading at a given period in time. In the case of Fall Channels, they are amazingly precise as well.

I have never seen a properly drawn Control line that was in error. I have never seen a properly drawn Eye that failed to beat price down. 'One does not simply walk into Mordor'...

Understanding how best to use Control Lines and The Eye gives us a roadmap. Then we do not walk.

We ride.

The Eye

The Eye is the single most powerful downward artifact on the model. While it may not control the price downward like a control line does, it instead seems to erect an impenetrable wall of thick turbulence against a rising price.

Several attempts usually must be made before price is able to cross the Eye and it can take days, weeks or even months between each attempt. I sometimes refer to it as Sauron's Eye, because of the devastation it is capable of wreaking, and the way price seems to run from it.

As I keep reminding throughout the book, we are modeling lines of turbulence between forces acting on price over time. The most common appearance of The Eye is formed when a reflection line appears very close to a strong Control line. The end result is a thick area of turbulence that acts as a barrier to a rising price.

The top line of the Eye is almost always a control line that has been adjusted over time as each new peak and trough are played through. You could argue that each control line is in fact the top rail of its own Eye and technically you would be somewhat correct, but mostly wrong. Not all Control lines have a reflection close enough to form the lower rail of the Eye, and Peak Eye has no true control line at all when it forms, so it's best to keep them separate in your mind.

The Eye can seem to be quite complex. The theory behind it is very simple however. Let's fall back a bit and review some basics.

When we are modeling lines of force, what we are actually doing is exposing the most turbulent areas where the upward and downward forces meet. In truth, these forces are always and everywhere acting against each other, but we are finding the major 'battle lines' these forces have developed over time.

As you might expect, some of these battles are more intense than others. And as we know, at times one line may indicate a strong battle and at other times the same line is weak. The forces are valid across the model, but the focus of their interactions against each other move from line to line across time.

So we see that at times a force line may have very little turbulence, and at other times the turbulence of that line may be massive. We're not talking about the thickness of the actual line on the model, but the depth of turbulence that the line may represent.

We may determine how thick the line appears on the model, but we are only observers of the action. We do not decide how strong a force the line represents. We can only observe and try to report the action accurately.

Metaphorical Mordor

Imagine that each force is an army, and at times they're just posting border patrols against each other, keeping the line at a one to one ratio. And then along comes some reinforcement from the downward side, which is soon matched by more reinforcements.

Now we have our downward 'troops' standing two men deep. As more and more troops arrive our downward forces have multiplied and the area required for them increases in depth until we have our troops standing in rows one hundred deep.

Meanwhile, the upward forces see only the border patrol. The downward forces are hidden away, ready to strike back at any attempt to cross the line. The massive downward army repels each successive attempt.

The upward army pauses to build up its forces enough to try one final attempt near their trendline. They either succeed and move beyond the downward army or else it destroys them, and price tumbles.

The turbulence we are showing in the Eye is similar to this. Keeping with our war metaphor, the Eye shows a major buildup of the downward forces in response to the previous parabolic peak. That peak exhausted the downward forces and they are regrouping ahead of an expected follow on from the upward forces. The Eye's intention is to push price back down to the beginning of the parabolic rise, far below the current trendline.

Almost every Eye contains a Control line and the ones that do not are based on reflections of control lines.

In fact, sometimes the Eye presents itself as just another Control line – nothing special. It is only after it has wreaked its havoc on price that we recognize how strong it really is.

Recall that the Control line leads price down to a strong uptrend line. ***The Eye tries to force price BELOW the uptrend***. In a sense, it builds a thick wall against upward price movement.

It usually takes several attempts to overcome the force of the Eye. These attempts can occur in rapid succession or months can pass between each. When dealing with the Eye of Sauron you may see the price languish for longer than you are willing to wait.

The Eye is completed in one of two ways. In the first and most common way, a triangle is observed to form a wedge between the Eye and a strong upward force line. Price will work through the wedge and either successfully cross it or will be forced down into a lower trading channel.

Or you may see price immediately reject the Eye and fall to the upward force line. It will trade relatively flat for a few days and then mount an offensive against the Eye. Price will approach the eye very decisively, with strong green candles, for a couple of days and then gap across the entire Eye on a new upswing.

You can seldom know which method will complete the Eye just from looking at your model. It is an extremely strong downward force. It is best to be cautious any time you identify the Eye.

Once a model forms an Eye and completes it, you should be on the lookout for another forming Eye at a higher price level. This second Eye may originate from the same source wicks, or it may appear originating from wicks at higher and previous price levels than the first Eye.

A stock that forms an Eye will form another Eye at some point in time before or during the next parabolic peak. Knowing where this resides on your model should help time your trades into and out of the stock as it rises to its next peak.

The most easily recognized Eye appears after a peak and subsequent bottom is established. The price tries to rebound and rises within a day or two to a new peak substantially lower than the previous one. That peak is the beginning of the top line of the Eye.

You cannot draw the line yet, though. After some time has passed, perhaps a couple of weeks, several peaks and troughs have been established. Your post peak model should show some organization with a control or rail line drawn through the last peak.

That control line started from the subpeak established from the peak's bottom, less than a few days after the fall. Either the day before or the day after, there may be another candle that tops out very close to that one. If not, your subpeak candle may have long wicks at the top or bottom, or the candle itself may be long with small wicks.

It doesn't matter which you've got. Duplicate that control line and place it on the high from the day before, or the day after. Examine how that placement fits in with everything else on the model.

Sometimes a control line acts alone, and there is no Eye. If that is the case, your duplicate line will not really ‘fit’ across the model and you can remove it. Other times, as soon as you place the line you can see the effect the Eye has had on price, and you know your duplicate line is real.

It’s easy to recognize the eye. You will see the top line touch across the tops of one or more subsequent wicks, and the lower line will cross those points exactly at the base of the wick.

If it's real then you want to leave it. You might even want to highlight it in some way. It will be a great obstacle to a rising price.

Cautionary Tales

Cautionary Tales: MNKD

I first identified a local control line in June 2014 which indicated that MNKD was trading to a point in July at the edge of a steep upward trading channel.

I watched for a month as price oscillated wildly above and below that control line, making it look like the control line was a fake. Over time price settled down and the control line's influence became obvious.

On July 23 I posted a model showing clearly, I thought, that price had followed that control line, retested the channel bottom at least twice and was approaching it again. The comment on the model says, "I figure I have at most one more day to buy in below 10 bucks."

The next day, I watched as price tested that right rail three separate times before I bought in. Just 100 shares to begin with, as I always do. Within thirty minutes the stock had dropped more than a dollar, recovering only slightly at the close.

The control line's job is to lead price to support. Nothing can ever be inferred further than that simple statement. Its ability to 'predict' the future ends there.

In this case, we were led to the edge and we dropped hard to the long term support midline before rebounding briefly. Over the next couple of weeks price moved generally sideways along the long term support, until…

On August 11 the partnership with Sanofi was announced. Price spiked and fell in typical MNKD fashion and closed disappointingly low. As the price continued to fall, a valid Fall Channel evolved with a new control line that led price down to its very long term support baseline. In September price exited the Fall Channel precisely on the control line, slightly above the baseline. A few days later it began dropping toward the long term baseline along that same control line.

The control line's job is to lead price to the support. Nothing else can be inferred from the control line.

Luckily, I saw the initial breakdown as it occurred and sold those hundred shares for just a slight loss. I understood that the control line didn't mislead me, but rather I had misled myself.

I assumed that price would rise because it had taken such a long correction. The FDA was behind us. The partnership was assured. All the so-called 'Binary Events" were completed. (Interesting that Binary Events are seldom that, but I digress.)

The thing is this: ***These artifacts are pretty accurate when drawn correctly. But they will never, ever predict the future past their ability***. Control lines do what they do and nothing more. Keep your eyes open.

Cautionary Tales: RGSE

I watched RGSE as it completed what appeared to be its Fall Channel, complete with control lines that seemed to predict the price movement, although admittedly not as well as other models. I shrugged off this slight difference in accuracy, thinking that the accuracy of the concept of Lines Of Force probably existed within a range of possibilities, and that I should expect some statistically notable exceptions to the norm.

I plotted the lines as I would any other stock, and they were nearly right, but I had to devise a way to look at the stock that to me seemed 'out of focus', with forces that were nearly parallel, but not quite. What I referred to as 'cracks' appeared in the model. The price points simply did not line up perfectly, regardless of what I tried.

I trusted that the basic concept for modeling stocks was sound, as it worked so well with every other stock I tried. I reasoned that this stock was actually showing me two sets of forces, each valid. I decided to superimpose both forces on the model, and price seemed to follow one, and then the other as it progressed over a couple of months.

As the model evolved, the Fall Channel seemed apparent with its associated control lines. The primary cross-peak line pointed to a much lower exit than we actually saw, but that was ignored as price drew a nearly perfect 'W' shape as it exited the Fall Channel. In my mind, the 'W' was more important in calling a bottom for the drop, even though it was not even an artifact my model should recognize. **This was my rookie mistake: mixing my methods.** I forgot I was modeling Forces, not prices.

As time passed the ringing phase never set itself into motion, instead gapping down after the initial 'W' and continuing lower over the next month to finally touch the support baseline that the fall channel control line had pointed toward. It rebounded twice from there, but could not sustain a rise.

By then I had stopped looking at the Fall Channel. I simply could not see that the model was broken. On its third bounce off an established uptrend line I bought one hundred shares, planning to add 900 more the next day.

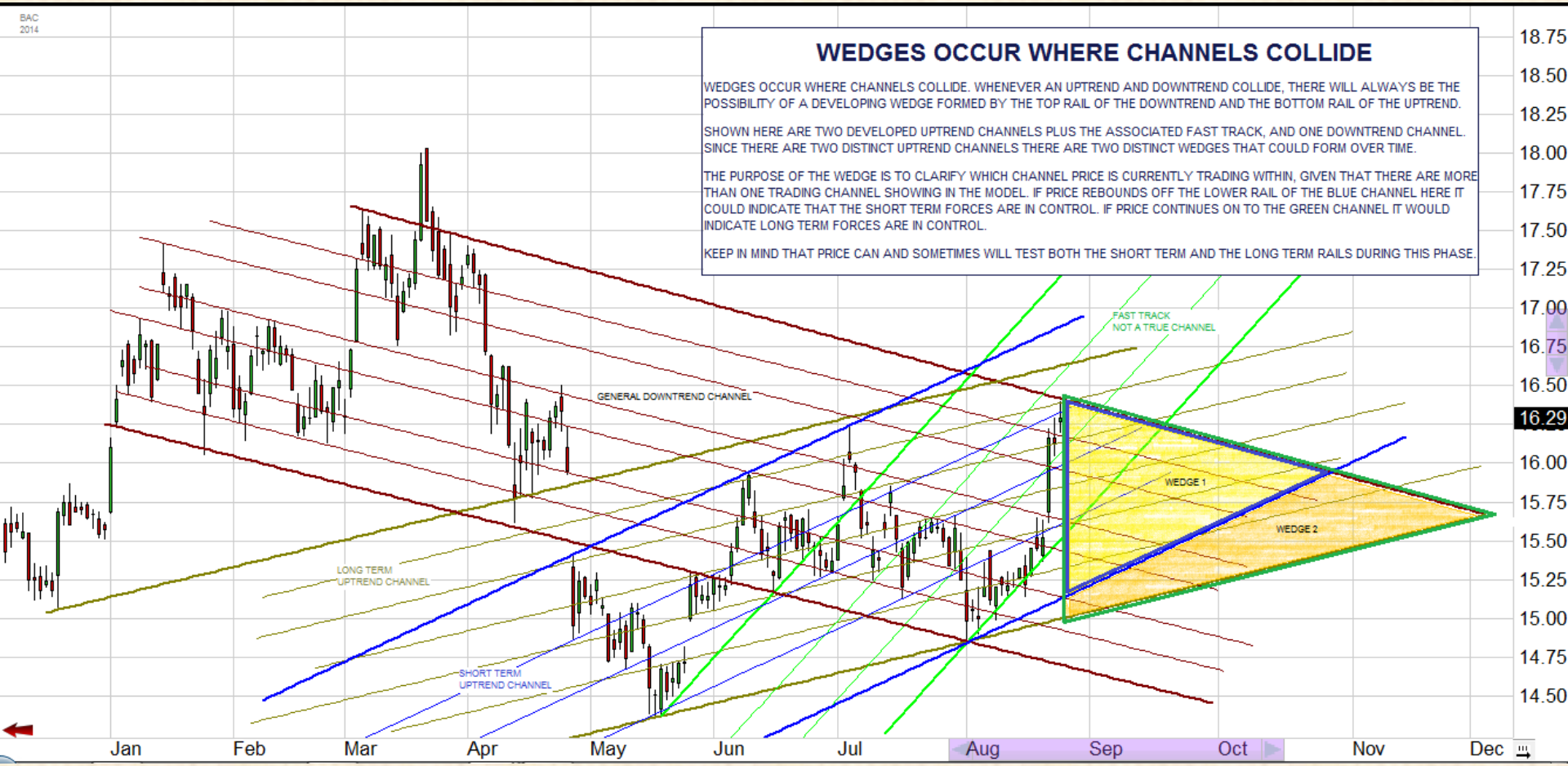
The next day price showed a hammer up above the local control line. Luckily, I was overworked that day, so I had no time to add the rest of my position. The day after that price tanked from 2.20 to close at 1.83, gapping down.

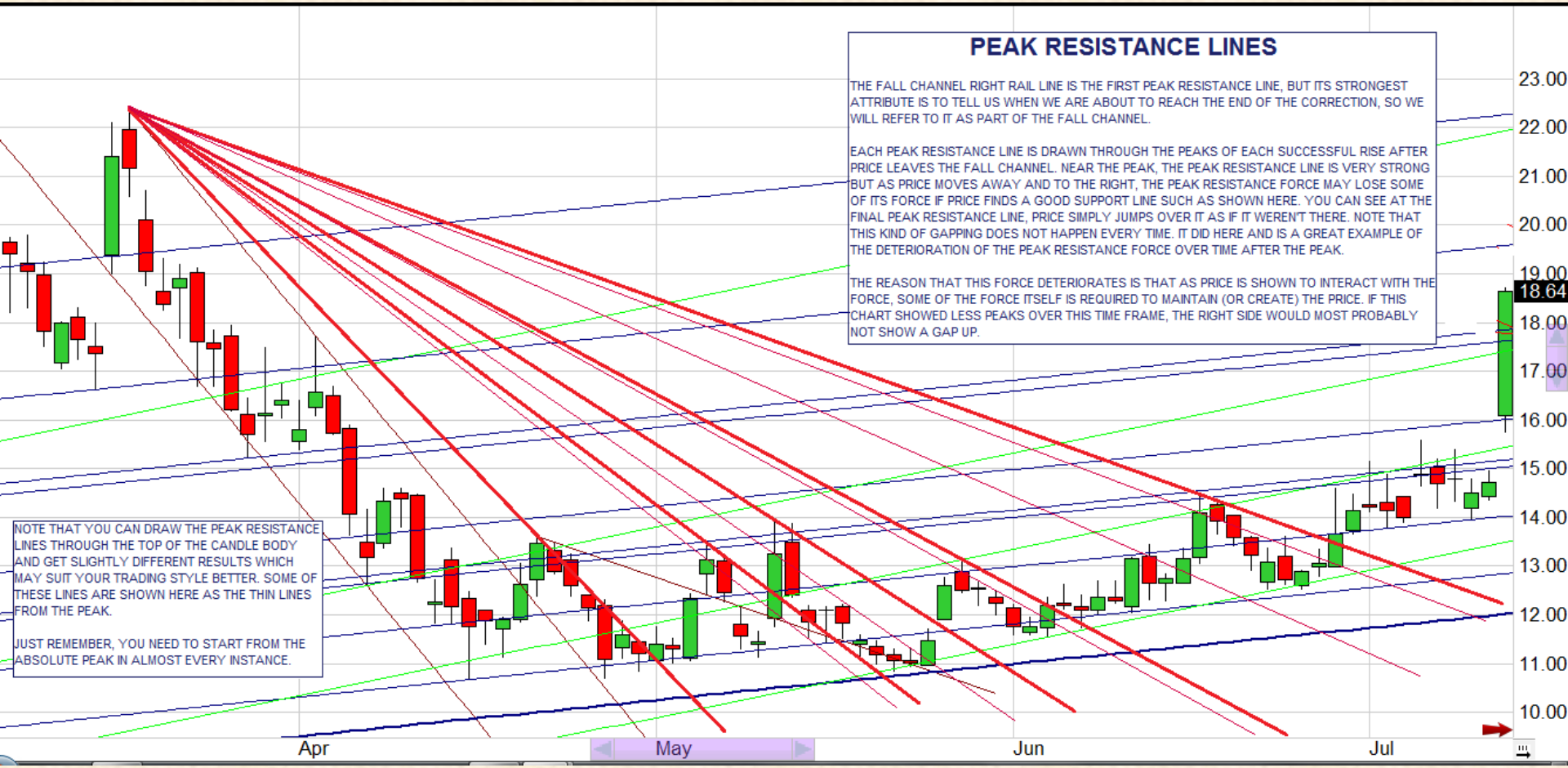
Two days later I discovered my error. What I had seen as a Fall Channel was in fact a downtrend channel and every control line, when plotted in the context of a downtrend channel, showed price heading much lower. To top it off, there was a Peak Eye that had controlled price for nearly two months, and I had missed it. Because I was looking for a rise based on a *price* artifact that wasn't even part of the model. The 'W' doesn't carry weight here.

Always remember: We are modeling forces, not prices.

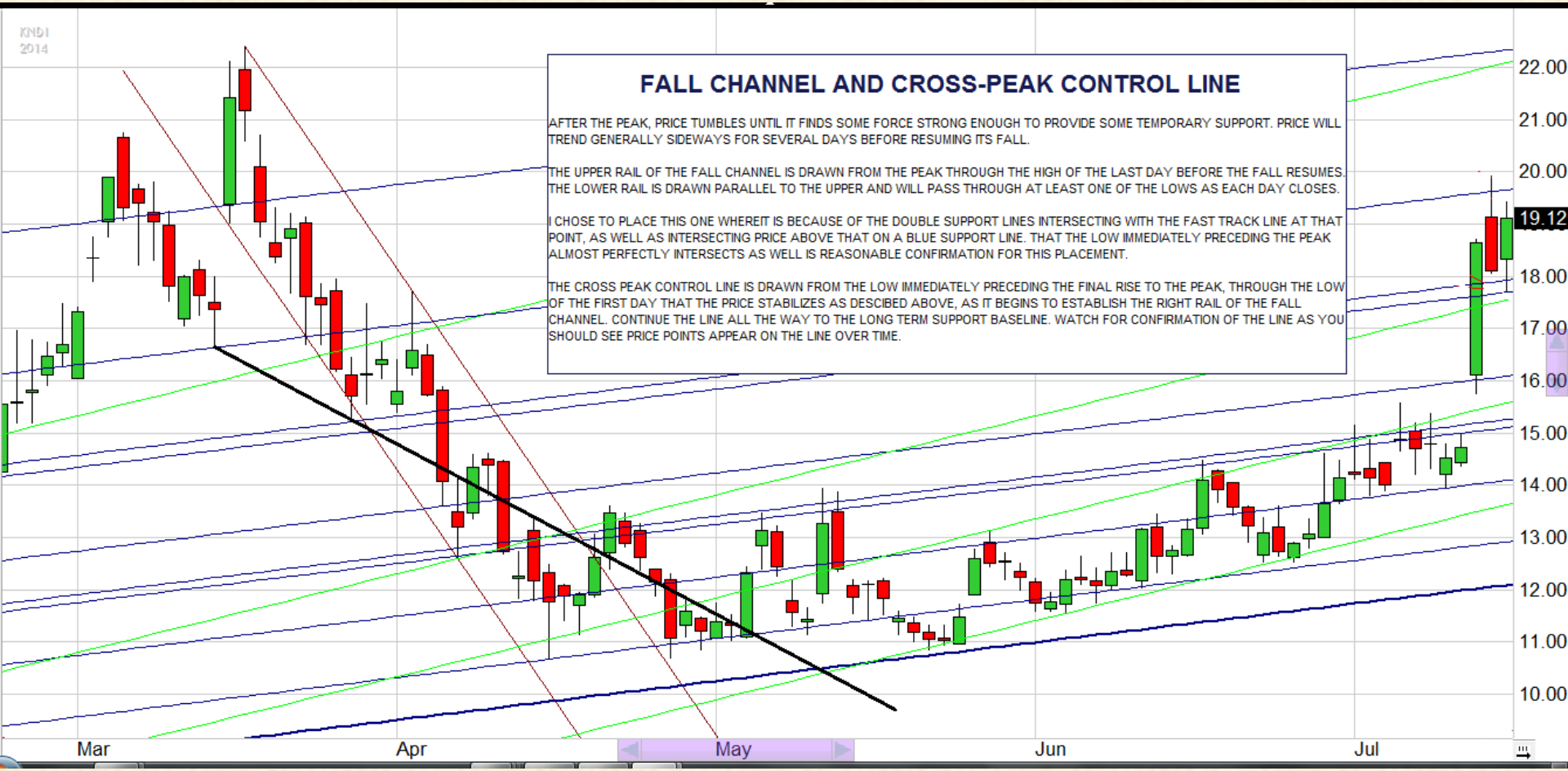
Illustrations of the Artifacts

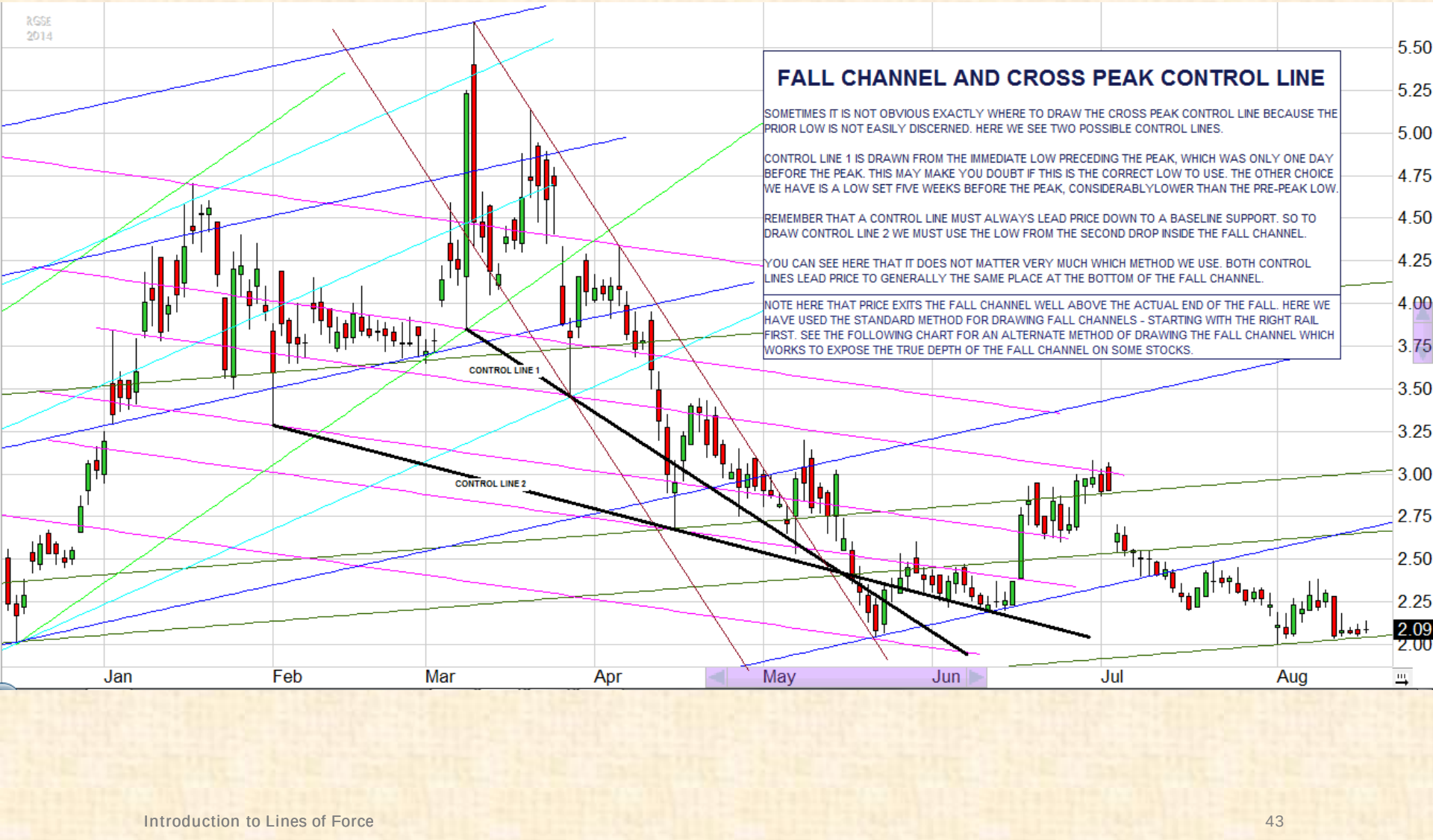

KNDI
2014
MODELING CHANNELS
CHANNEL LINES ARE NEITHER SUPPORT NOR RESISTANCE - BUT THEY WILL ACT AS BARRIERS TO PRICE MOVEMENT FROM EITHER DIRECTION. CHANNEL LINES ARE COMMON IN ALMOST ANY TECHNICAL ANALYSIS OF STOCK PRICE MOVEMENTS, AND GO BY MANY NAMES. IN OUR METHOD WE MAY REFER TO THEM AS CHANNEL LINES, UPTREND/DOWNTREND LINES, AND SOMETIMES FAST TRACKS.
SHOWN HERE ARE THE TWO PRIMARY UPWARD CHANNELS WHICH DEVELOPED OVER THREE YEARS OF TRADING, ALONG WITH THE FALL CHANNEL FROM THE PREVIOUS PEAK.
LONG TERM CHANNEL TOP RAIL
MEDIUM TERM CHANNEL TOP RAIL
MEDIUM TERM CHANNEL BOTTOM RAIL
MEIUM TERM CHANNEL SOURCE LINE
LONG TERM CHANNEL BOTTOM RAIL (BASELINE)
FOR EACH OF THE UPWARD CHANNELS SHOWN HERE, A REFERENCE LINE WAS DRAWN FIRST AS A SOURCE LINE, AND THEN REFLECTIONS WERE TESTED ACROSS THE CHART TO FIND THE AREAS WITH THE MOST TURBULENCE, AS SHOWN BY PRICE POINTS, ESPECIALLY HIGHS AND LOWS FROM EACH DAY.
FOR THE LONG TERM CHANNEL. THE BOTTOM RAIL ITSELF IS USED AS THE BASELINE. FOR THE MEDIUM TERM CHANNEL, A LINE IS DRAWN FROM THE POINT WHERE PRICE STARTS ACCELERATING AWAY FROM THAT BASELINE, AND THE REFLECTIONS ARE TAKEN FROM THAT. THE MEDIUM TERM BOTTOM RAIL MAY CHANGEOVER TIME, BUT THE LONG TERM SHOULD NOT CHANGE.
24.00
23.00
22.00
21.00
20.00
19.28
18.00
17.00
16.00
15.00
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep

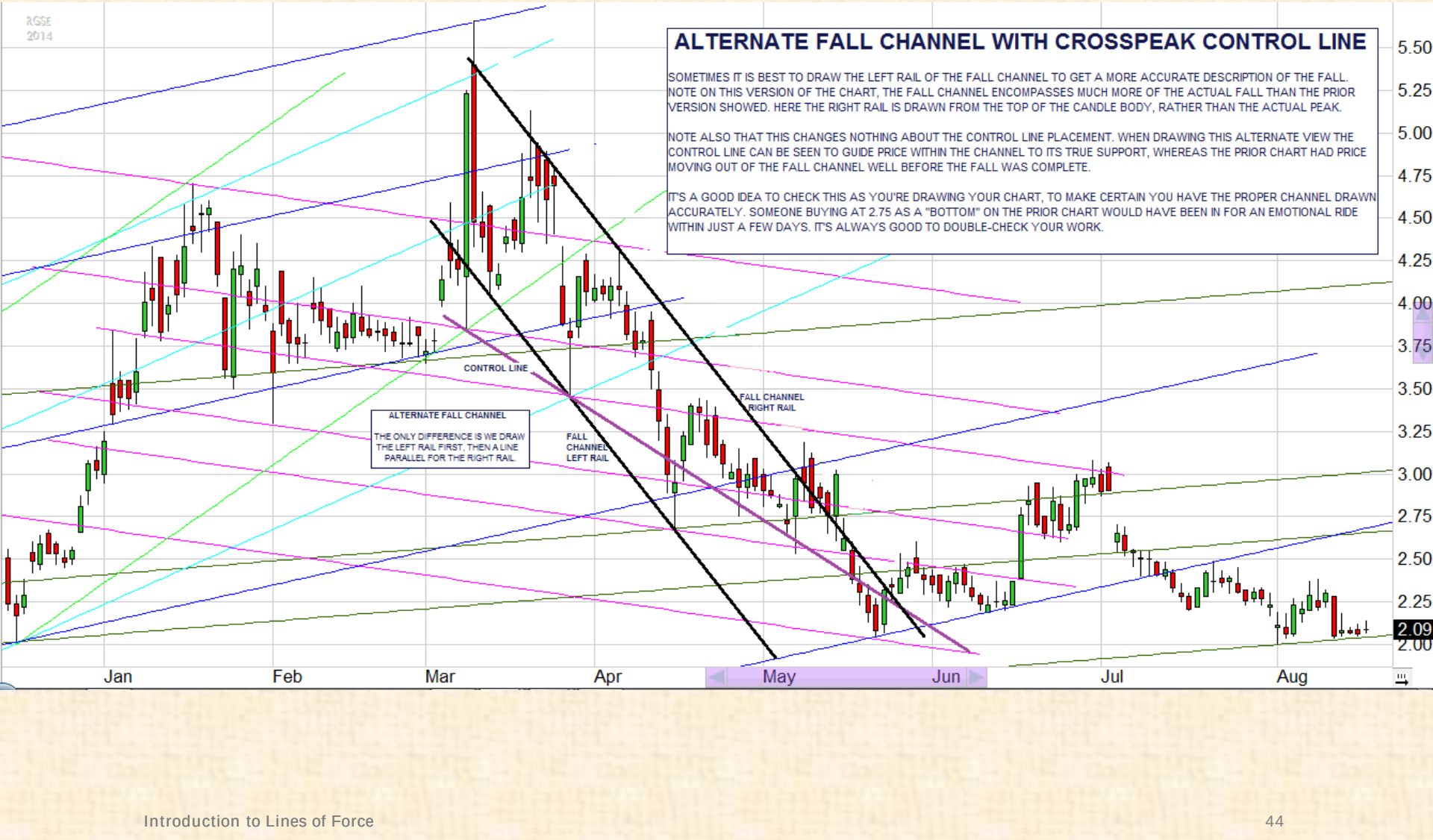

BAC
2014
WEDGES OCCUR WHERE CHANNELS COLLIDE
WEDGES OCCUR WHERE CHANNELS COLLIDE. WHENEVER AN UPTREND AND DOWNTREND COLLIDE, THERE WILL ALWAYS BE THE POSSIBILITY OF A DEVELOPING WEDGE FORMED BY THE TOP RAIL OF THE DOWNTREND AND THE BOTTOM RAIL OF THE UPTREND.
SHOWN HERE ARE TWO DEVELOPED UPTREND CHANNELS PLUS THE ASSOCIATED FAST TRACK, AND ONE DOWNTREND CHANNEL. SINCE THERE ARE TWO DISTINCT UPTREND CHANNELS THERE ARE TWO DISTINCT WEDGES THAT COULD FORM OVER TIME.
THE PURPOSE OF THE WEDGE IS TO CLARIFY WHICH CHANNEL PRICE IS CURRENTLY TRADING WITHIN, GIVEN THAT THERE ARE MORE THAN ONE TRADING CHANNEL SHOWING IN THE MODEL. IF PRICE REBOUNDS OFF THE LOWER RAIL OF THE BLUE CHANNEL HERE IT COULD INDICATE THAT THE SHORT TERM FORCES ARE IN CONTROL. IF PRICE CONTINUES ON TO THE GREEN CHANNEL IT WOULD INDICATE LONG TERM FORCES ARE IN CONTROL.
KEEP IN MIND THAT PRICE CAN AND SOMETIMES WILL TEST BOTH THE SHORT TERM AND THE LONG TERM RAILS DURING THIS PHASE.
FAST TRACK
NOT A TRUE CHANNEL
GENERAL DOWNTREND CHANNEL
WEDGE 1
WEDGE 2
LONG TERM
UPTREND CHANNEL
SHORT TERM
UPTREND CHANNEL
18.75
18.50
18.25
18.00
17.75
17.50
17.25
17.00
16.75
16.50
16.29
16.00
15.75
15.50
15.25
15.00
14.75
14.50
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec


PEAK RESISTANCE LINES
THE FALL CHANNEL RIGHT RAIL LINE IS THE FIRST PEAK RESISTANCE LINE, BUT ITS STRONGEST ATTRIBUTE IS TO TELL US WHEN WE ARE ABOUT TO REACH THE END OF THE CORRECTION, SO WE WILL REFER TO IT AS PART OF THE FALL CHANNEL.
EACH PEAK RESISTANCE LINE IS DRAWN THROUGH THE PEAKS OF EACH SUCCESSFUL RISE AFTER PRICE LEAVES THE FALL CHANNEL. NEAR THE PEAK, THE PEAK RESISTANCE LINE IS VERY STRONG BUT AS PRICE MOVES AWAY AND TO THE RIGHT, THE PEAK RESISTANCE FORCE MAY LOSE SOME OF ITS FORCE IF PRICE FINDS A GOOD SUPPORT LINE SUCH AS SHOWN HERE. YOU CAN SEE AT THE FINAL PEAK RESISTANCE LINE, PRICE SIMPLY JUMPS OVER IT AS IF IT WEREN'T THERE. NOTE THAT THIS KIND OF GAPPING DOES NOT HAPPEN EVERY TIME. IT DID HERE AND IS A GREAT EXAMPLE OF THE DETERIORATION OF THE PEAK RESISTANCE FORCE OVER TIME AFTER THE PEAK.
THE REASON THAT THIS FORCE DETERIORATES IS THAT AS PRICE IS SHOWN TO INTERACT WITH THE FORCE, SOME OF THE FORCE ITSELF IS REQUIRED TO MAINTAIN (OR CREATE) THE PRICE. IF THIS CHART SHOWED LESS PEAKS OVER THIS TIME FRAME, THE RIGHT SIDE WOULD MOST PROBABLY NOT SHOW A GAP UP.
NOTE THAT YOU CAN DRAW THE PEAK RESISTANCE LINES THROUGH THE TOP OF THE CANDLE BODY AND GET SLIGHTLY DIFFERENT RESULTS WHICH MAY SUIT YOUR TRADING STYLE BETTER. SOME OF THESE LINES ARE SHOWN HERE AS THE THIN LINES FROM THE PEAK.
JUST REMEMBER, YOU NEED TO START FROM THE ABSOLUTE PEAK IN ALMOST EVERY INSTANCE.
23.00
22.00
21.00
20.00
19.00
18.64
18.00
17.00
16.00
15.00
14.00
13.00
12.00
11.00
10.00
Apr
May
Jun
Jul

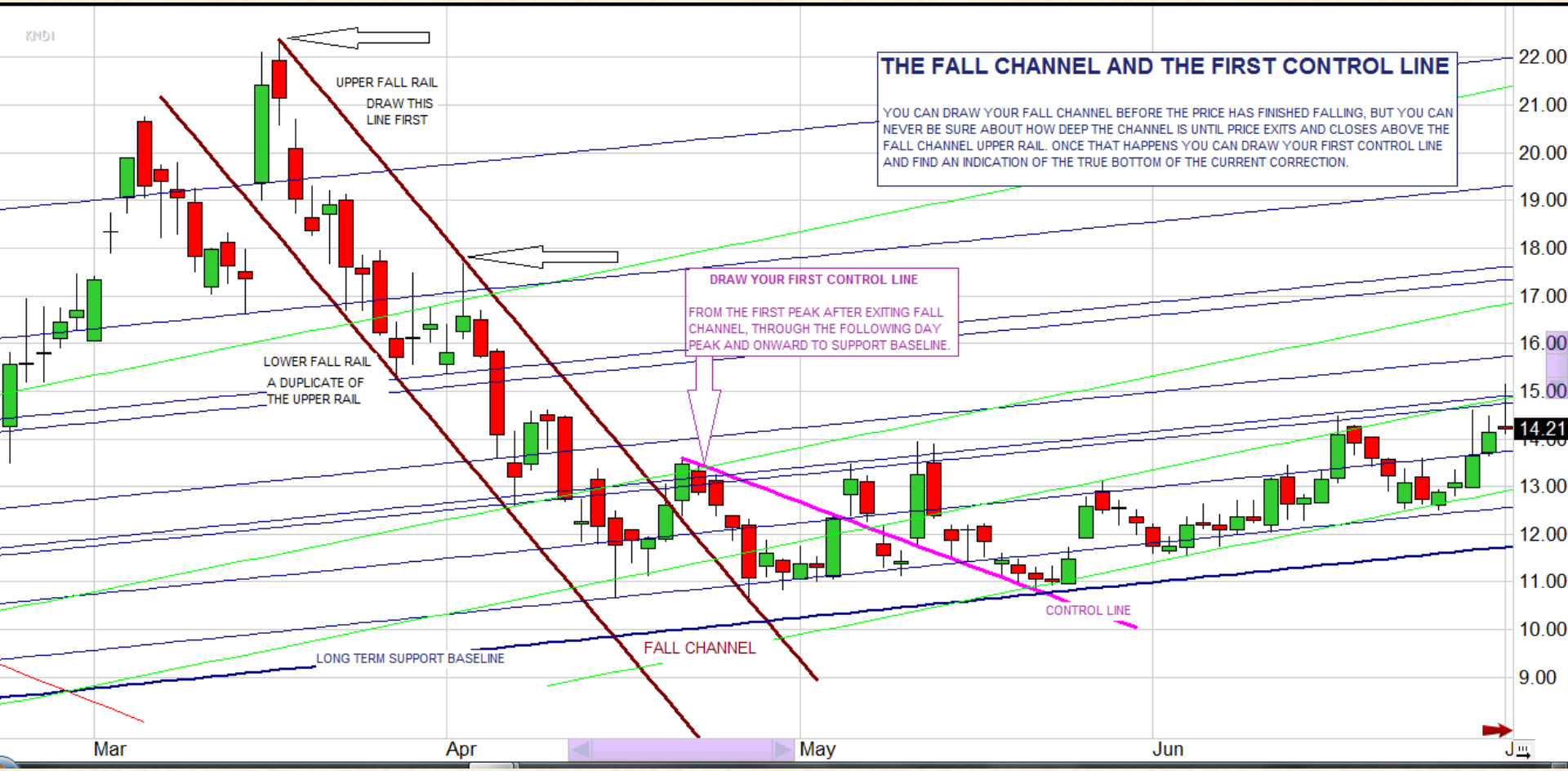

RGSE
2014
PEAK RESISTANCE
OLD PEAK RESISTANCE
NEW PEAK RESISTANCE
PEAK RESISTANCE - PLACEMENT
ALWAYS MOVE YOUR PEAK RESISTANCE LINE TO EACH NEW PEAK, EVEN IF THE CURRENT PEAK IS LOWER THAN THE ONE PRECEDING IT.
NOTICE HERE THE NEAR ABSENCE OF SIMPLE CONTROL LINES. IN A NORMAL PEAK / RINGING EVENT THERE WILL ALWAYS BE SIMPLE CONTROL LINES APPEARING AT EACH MINOR PEAK.
THIS MAKES THE PEAK RESISTANCE LINE ALL THE MORE IMPORTANT, AS THERE IS NO CONTROL LINE TO MEDIATE THE DOWNWARD FORCE. REMEMBER, AT THE PEAK THE DOWNWARD FORCE IS 100%.
PRICE INTERACTING ALONG CONTROL LINES IS ONE OF THE THINGS THAT KEEPS UPWARD FORCES IN PLAY LONG ENOUGH TO REGAIN CONTROL. WITHOUT ITS MODERATE INFLUENCE, PEAK RESISTANCE RULES.
A GOOD GENERAL RULE TO FOLLOW IS TO MOVE THE PEAK RESISTANCE LINE EACH TIME PRICE CLOSES ABOVE THE OLD LINE.
5.50
5.25
5.00
4.75
4.50
4.25
4.00
3.75
3.50
3.25
3.00
2.75
2.50
2.25
2.09
2.00
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug

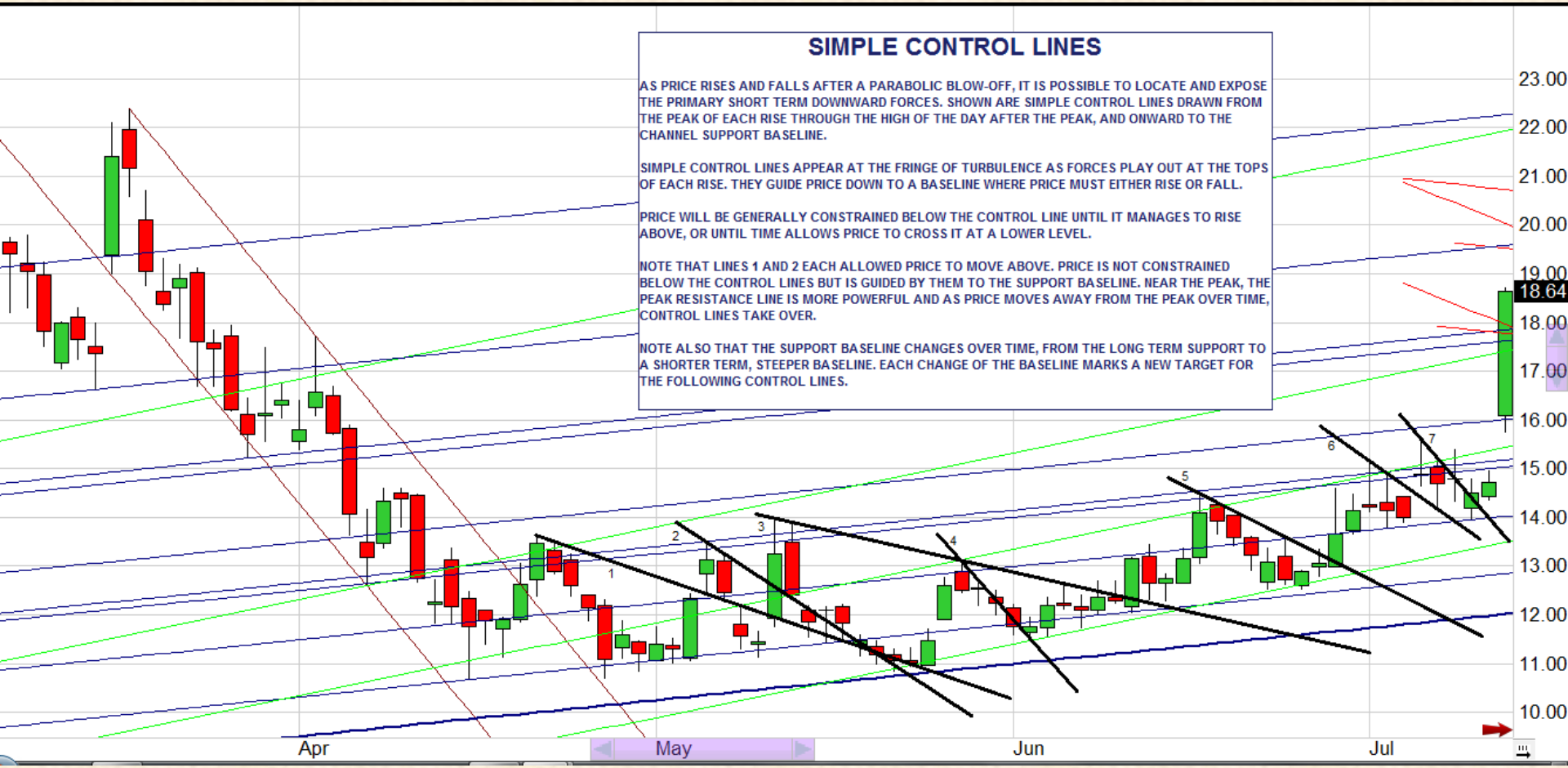

KNDI
2014
FALL CHANNEL AND CROSS-PEAK CONTROL LINE
AFTER THE PEAK, PRICE TUMBLES UNTIL IT FINDS SOME FORCE STRONG ENOUGH TO PROVIDE SOME TEMPORARY SUPPORT. PRICE WILL TREND GENERALLY SIDEWAYS FOR SEVERAL DAYS BEFORE RESUMING ITS FALL.
THE UPPER RAIL OF THE FALL CHANNEL IS DRAWN FROM THE PEAK THROUGH THE HIGH OF THE LAST DAY BEFORE THE FALL RESUMES. THE LOWER RAIL IS DRAWN PARALLEL TO THE UPPER AND WILL PASS THROUGH AT LEAST ONE OF THE LOWS AS EACH DAY CLOSES.
I CHOSE TO PLACE THIS ONE WHEREIT IS BECAUSE OF THE DOUBLE SUPPORT LINES INTERSECTING WITH THE FAST TRACK LINE AT THAT POINT, AS WELL AS INTERSECTING PRICE ABOVE THAT ON A BLUE SUPPORT LINE. THAT THE LOW IMMEDIATELY PRECEDING THE PEAK ALMOST PERFECTLY INTERSECTS AS WELL IS REASONABLE CONFIRMATION FOR THIS PLACEMENT.
THE CROSS PEAK CONTROL LINE IS DRAWN FROM THE LOW IMMEDIATELY PRECEDING THE FINAL RISE TO THE PEAK, THROUGH THE LOW OF THE FIRST DAY THAT THE PRICE STABILIZES AS DESCIBED ABOVE, AS IT BEGINS TO ESTABLISH THE RIGHT RAIL OF THE FALL CHANNEL. CONTINUE THE LINE ALL THE WAY TO THE LONG TERM SUPPORT BASELINE. WATCH FOR CONFIRMATION OF THE LINE AS YOU SHOULD SEE PRICE POINTS APPEAR ON THE LINE OVER TIME.
22.00
21.00
20.00
19.12
18.00
17.00
16.00
15.00
14.00
13.00
12.00
11.00
10.00
Mar
Apr
May
Jun
Jul


RGSE
2014
FALL CHANNEL AND CROSS PEAK CONTROL LINE
SOMETIMES IT IS NOT OBVIOUS EXACTLY WHERE TO DRAW THE CROSS PEAK CONTROL LINE BECAUSE THE PRIOR LOW IS NOT EASILY DISCERNED. HERE WE SEE TWO POSSIBLE CONTROL LINES.
CONTROL LINE 1 IS DRAWN FROM THE IMMEDIATE LOW PRECEDING THE PEAK, WHICH WAS ONLY ONE DAY BEFORE THE PEAK. THIS MAY MAKE YOU DOUBT IF THIS IS THE CORRECT LOW TO USE. THE OTHER CHOICE WE HAVE IS A LOW SET FIVE WEEKS BEFORE THE PEAK, CONSIDERABLYLOWER THAN THE PRE-PEAK LOW.
REMEMBER THAT A CONTROL LINE MUST ALWAYS LEAD PRICE DOWN TO A BASELINE SUPPORT. SO TO DRAW CONTROL LINE 2 WE MUST USE THE LOW FROM THE SECOND DROP INSIDE THE FALL CHANNEL.
YOU CAN SEE HERE THAT IT DOES NOT MATTER VERY MUCH WHICH METHOD WE USE. BOTH CONTROL LINES LEAD PRICE TO GENERALLY THE SAME PLACE AT THE BOTTOM OF THE FALL CHANNEL.
NOTE HERE THAT PRICE EXITS THE FALL CHANNEL WELL ABOVE THE ACTUAL END OF THE FALL. HERE WE HAVE USED THE STANDARD METHOD FOR DRAWING FALL CHANNELS - STARTING WITH THE RIGHT RAIL FIRST. SEE THE FOLLOWING CHART FOR AN ALTERNATE METHOD OF DRAWING THE FALL CHANNEL WHICH WORKS TO EXPOSE THE TRUE DEPTH OF THE FALL CHANNEL ON SOME STOCKS.
CONTROL LINE 1
CONTROL LINE 2
5.50
5.25
5.00
4.75
4.50
4.25
4.00
3.75
3.50
3.25
3.00
2.75
2.50
2.25
2.09
2.00
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug


RGSE
2014
ALTERNATE FALL CHANNEL WITH CROSSPEAK CONTROL LINE
SOMETIMES IT IS BEST TO DRAW THE LEFT RAIL OF THE FALL CHANNEL TO GET A MORE ACCURATE DESCRIPTION OF THE FALL. NOTE ON THIS VERSION OF THE CHART, THE FALL CHANNEL ENCOMPASSES MUCH MORE OF THE ACTUAL FALL THAN THE PRIOR VERSION SHOWED. HERE THE RIGHT RAIL IS DRAWN FROM THE TOP OF THE CANDLE BODY, RATHER THAN THE ACTUAL PEAK.
NOTE ALSO THAT THIS CHANGES NOTHING ABOUT THE CONTROL LINE PLACEMENT. WHEN DRAWING THIS ALTERNATE VIEW THE CONTROL LINE CAN BE SEEN TO GUIDE PRICE WITHIN THE CHANNEL TO ITS TRUE SUPPORT, WHEREAS THE PRIOR CHART HAD PRICE MOVING OUT OF THE FALL CHANNEL WELL BEFORE THE FALL WAS COMPLETE.
IT'S A GOOD IDEA TO CHECK THIS AS YOU'RE DRAWING YOUR CHART, TO MAKE CERTAIN YOU HAVE THE PROPER CHANNEL DRAWN ACCURATELY. SOMEONE BUYING AT 2.75 AS A "BOTTOM" ON THE PRIOR CHART WOULD HAVE BEEN IN FOR AN EMOTIONAL RIDE WITHIN JUST A FEW DAYS. IT'S ALWAYS GOOD TO DOUBLE-CHECK YOUR WORK.
CONTROL LINE
ALTERNATE FALL CHANNEL
THE ONLY DIFFERENCE IS WE DRAW THE LEFT RAIL FIRST, THEN A LINE PARALLEL FOR THE RIGHT RAIL.
FALL CHANNEL LEFT RAIL
FALL CHANNEL RIGHT RAIL
5.50
5.25
5.00
4.75
4.50
4.25
4.00
3.75
3.50
3.25
3.00
2.75
2.50
2.25
2.09
2.00
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug

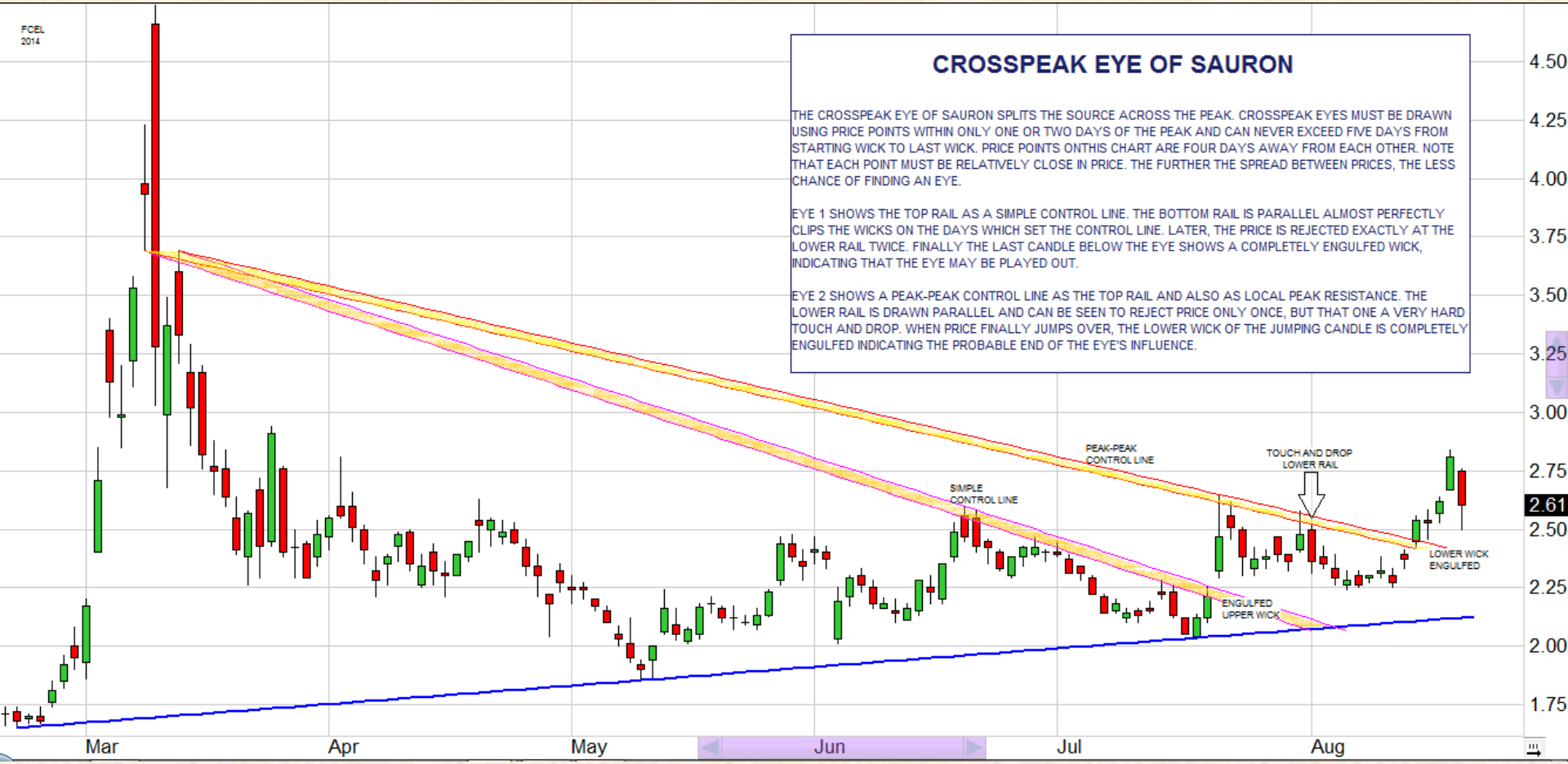

BLDP
2014
EXTENDED FALL CHANNEL
THE EXTENDED FALL CHANNEL IS A DOWNTREND CHANNEL THAT APPEARS FOR A SHORT TIME AFTER SOME PARABOLIC PEAKS. THE BOTTOM RAIL OF THIS CHANNEL IS CONSIDERED AN EXTENSION OF THE MAIN FALL CHANNEL. THE TOP RAIL IS ALSO AN EXTENSION, AND IS NOT DRAWN FROM THE PEAK ITSELF BUT RATHER IS A CROSSPEAK CONTROL LINE. THE BOTTOM RAIL, FOR OUR PURPOSES OF TARGETING THE FALL CHANNEL CONTROL LINE, IS USUALLY DRAWN THROUGH THE LOW OF THE PEAK DAY.
THE CONTROL LINE WILL BE DRAWN IN THE USUAL WAY AND WILL POINT TO AN EXIT OF THE INSIDE CHANNEL AT THE PROPER SUPPORT. ABOUT HALF WAY THROUGH THE FALL CHANNEL, YOU WILL NOTICE A DISTINCT BUT SUBTLE 'TURN' IN THE CHANNEL,SHOWN HERE BY THE RED LINES MINGLED INTO THE FALL CHANNEL. THIS SHOWS THE PRICE GENTLY TURN TO RISE ALONG THE EMERGENT FAST TRACKS.
TOP RAIL PROPER CHANNEL
TOP RAIL EXTENSION
BOTTOM RAIL FOR CONTROL LINE
CONTROL LINE
BOTTOM RAIL EXTENSION
PRICE CROSSES BOTTOM RAIL 2X AT CONTROL LINE
PRICE EXITS FALL CHANNEL AT CONTROL LINE AT LONGTERM UPTREND
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.80
3.50
3.00
2.50
2.00
1.50
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep

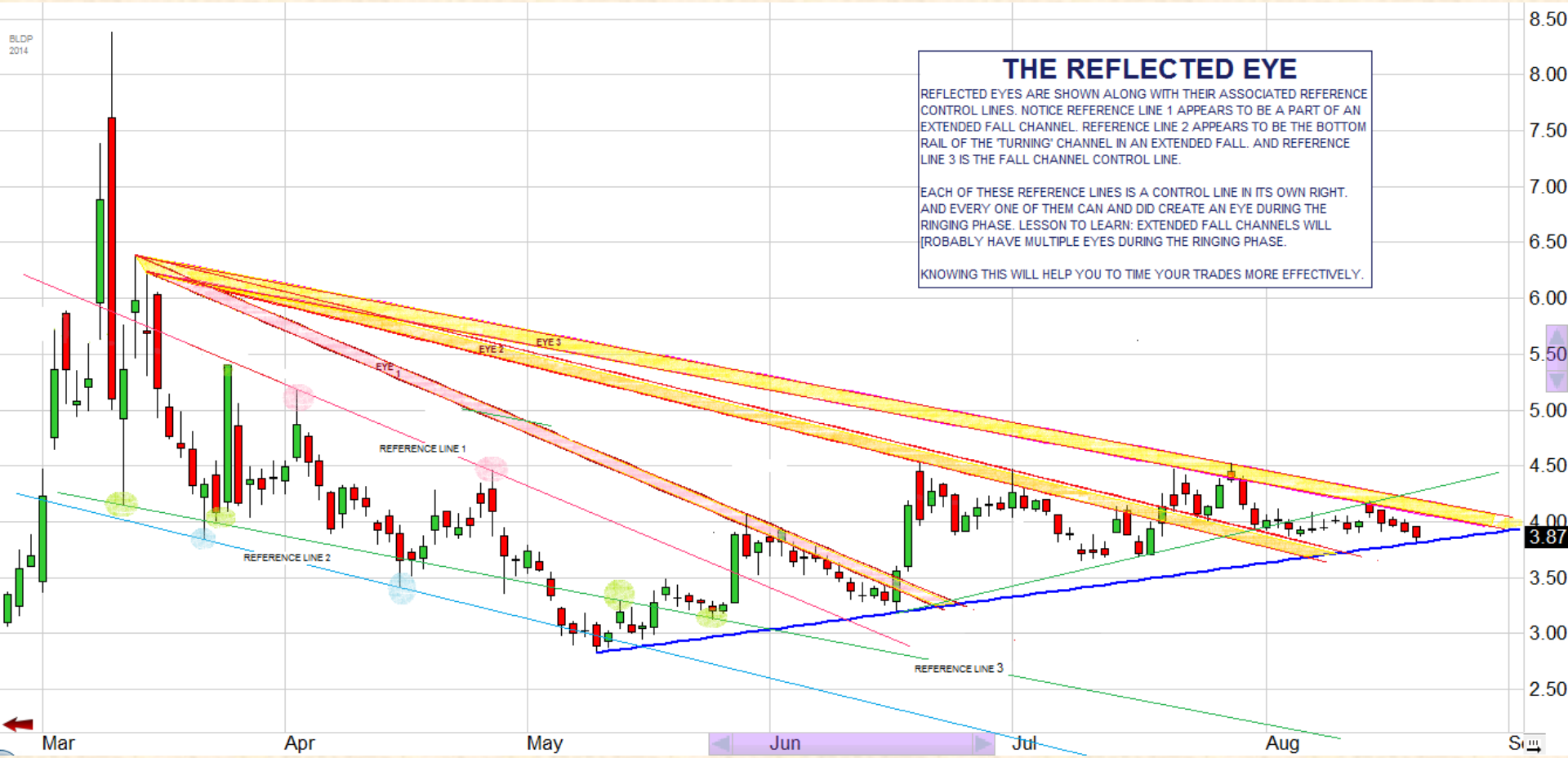

KNDI
THE FALL CHANNEL AND THE FIRST CONTROL LINE
YOU CAN DRAW YOUR FALL CHANNEL BEFORE THE PRICE HAS FINISHED FALLING, BUT YOU CAN NEVER BE SURE ABOUT HOW DEEP THE CHANNEL IS UNTIL PRICE EXITS AND CLOSES ABOVE THE FALL CHANNEL UPPER RAIL. ONCE THAT HAPPENS YOU CAN DRAW YOUR FIRST CONTROL LINE AND FIND AN INDICATION OF THE TRUE BOTTOM OF THE CURRENT CORRECTION.
UPPER FALL RAIL
DRAW THIS LINE FIRST
LOWER FALL RAIL
A DUPLICATE OF THE UPPER RAIL
DRAW YOUR FIRST CONTROL LINE
FROM THE FIRST PEAK AFTER EXITING FALL CHANNEL, THROUGH THE FOLLOWING DAY PEAK AND ONWARD TO SUPPORT BASELINE.
CONTROL LINE
FALL CHANNEL
LONG TERM SUPPORT BASELINE
22.00
21.00
20.00
19.00
18.00
17.00
16.00
15.00
14.21
13.00
12.00
11.00
10.00
9.00
Mar
Apr
May
Jun

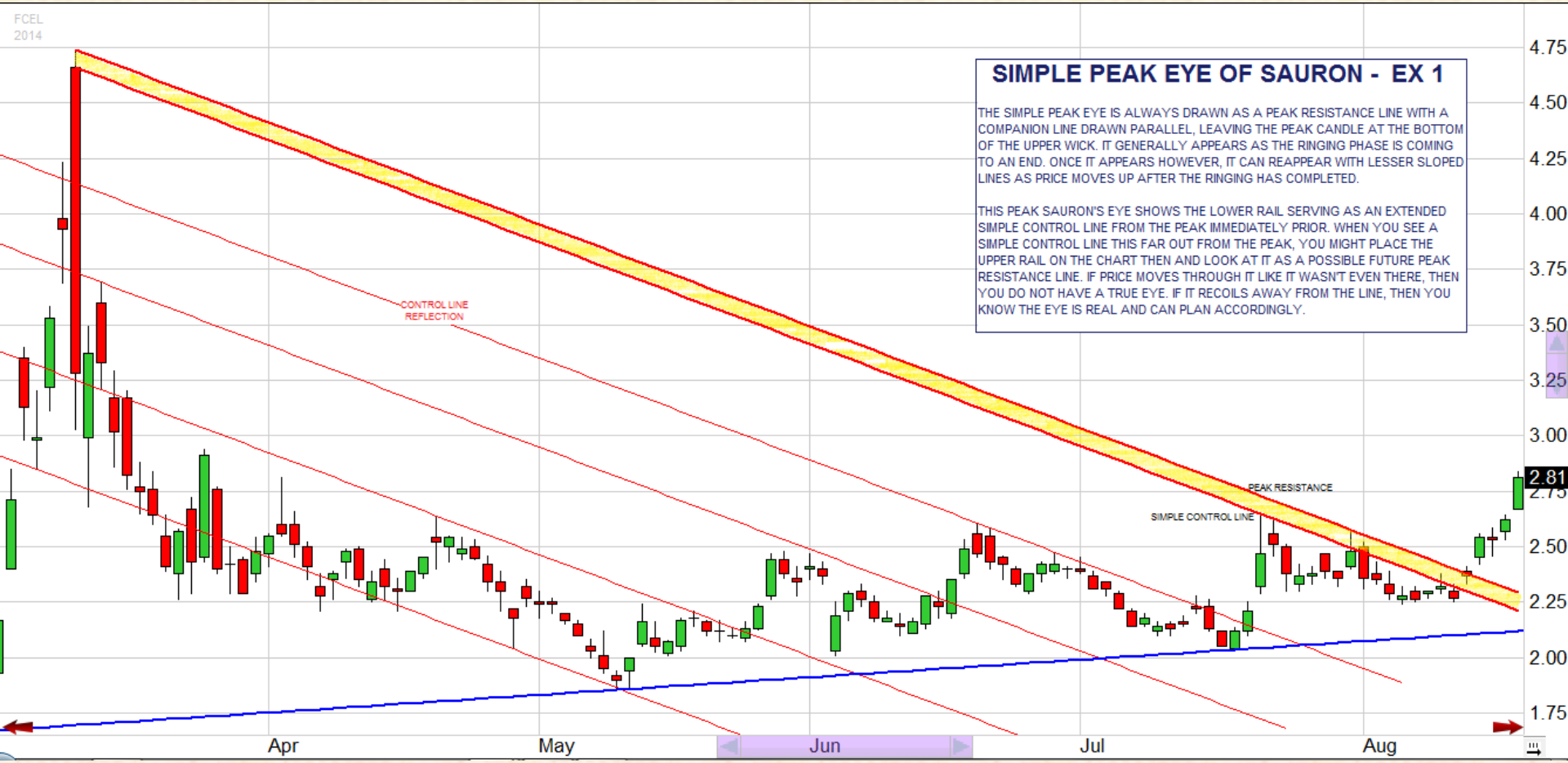

SIMPLE CONTROL LINES
AS PRICE RISES AND FALLS AFTER A PARABOLIC BLOW-OFF, IT IS POSSIBLE TO LOCATE AND EXPOSE THE PRIMARY SHORT TERM DOWNWARD FORCES. SHOWN ARE SIMPLE CONTROL LINES DRAWN FROM THE PEAK OF EACH RISE THROUGH THE HIGH OF THE DAY AFTER THE PEAK, AND ONWARD TO THE CHANNEL SUPPORT BASELINE.
SIMPLE CONTROL LINES APPEAR AT THE FRINGE OF TURBULENCE AS FORCES PLAY OUT AT THE TOPS OF EACH RISE. THEY GUIDE PRICE DOWN TO A BASELINE WHERE PRICE MUST EITHER RISE OR FALL.
PRICE WILL BE GENERALLY CONSTRAINED BELOW THE CONTROL LINE UNTIL IT MANAGES TO RISE ABOVE, OR UNTIL TIME ALLOWS PRICE TO CROSS IT AT A LOWER LEVEL.
NOTE THAT LINES 1 AND 2 EACH ALLOWED PRICE TO MOVE ABOVE. PRICE IS NOT CONSTRAINED BELOW THE CONTROL LINES BUT IS GUIDED BY THEM TO THE SUPPORT BASELINE. NEAR THE PEAK, THE PEAK RESISTANCE LINE IS MORE POWERFUL AND AS PRICE MOVES AWAY FROM THE PEAK OVER TIME, CONTROL LINES TAKE OVER.
NOTE ALSO THAT THE SUPPORT BASELINE CHANGES OVER TIME, FROM THE LONG TERM SUPPORT TO A SHORTER TERM, STEEPER BASELINE. EACH CHANGE OF THE BASELINE MARKS A NEW TARGET FOR THE FOLLOWING CONTROL LINES.
23.00
22.00
21.00
20.00
19.00
18.64
18.00
17.00
16.00
15.00
14.00
13.00
12.00
11.00
10.00
1
2
3
4
5
6
7
Apr
May
Jun
Jul

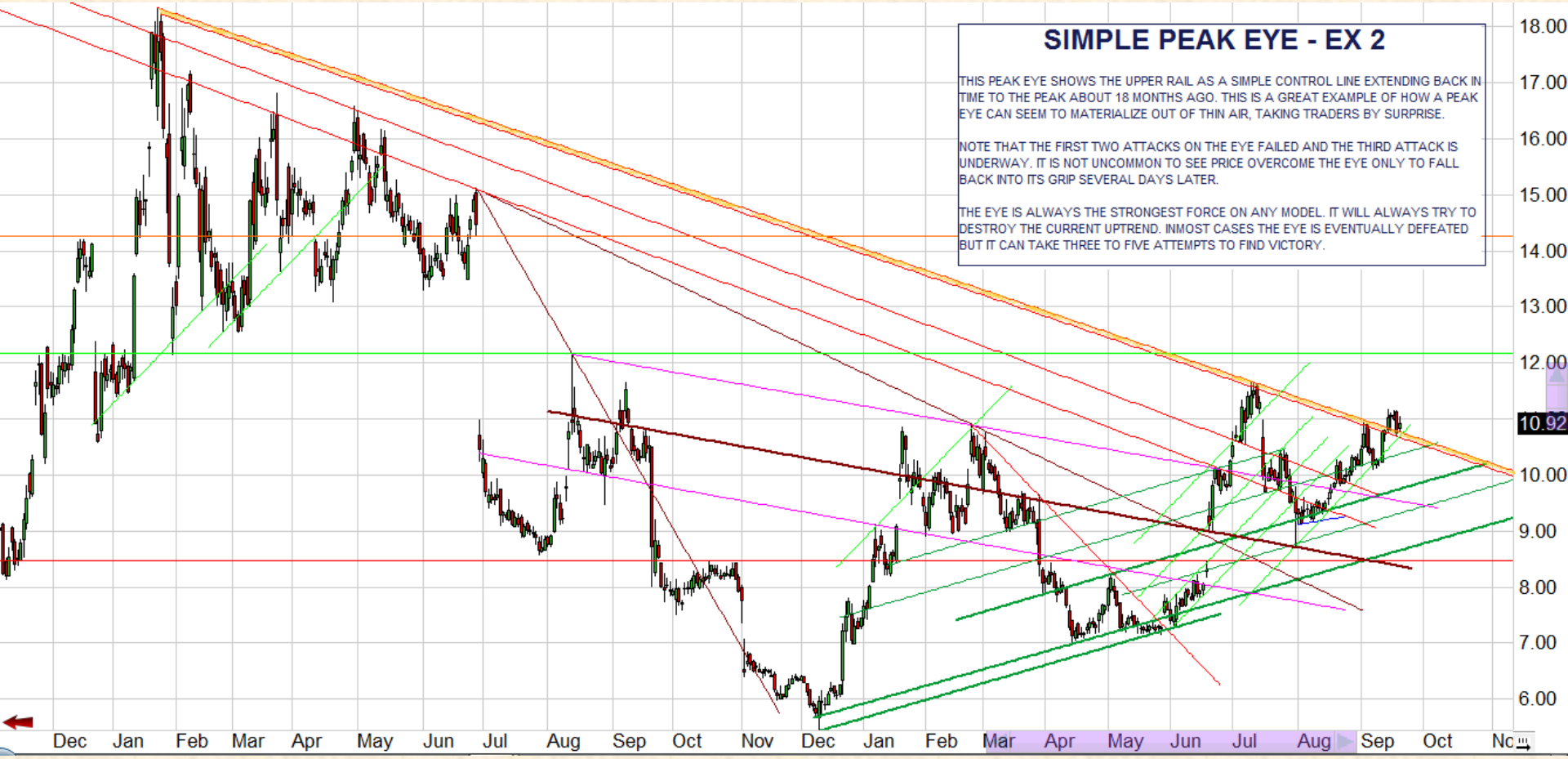

EVRY
2014
EYE
RINGING
CONTROL LINE
REFLECTION
UPTREND PEAK RAIL
REFLECTION
UPTREND TRADING CHANNEL
UPPER RAIL
UPTREND MIDLINE
UPTREND BASELINE
RINGING CONTROL LINE
RINGING CONTROL LINES ARE DRAWN ACROSS SUCCESSIVE PEAKS DURING THE RINGING PHASE AFTER A PEAK. RINGING CONTROLLINES USUALLY HAVE MANY REFLECTIONS, AND IN FACT USUALLY ARISE AS A REFLECTION OF A REGULAR DOWNWARD FORCE. MOST OF THE REFLECTIONS HAVE BEEN REMOVED FROM THIS MODEL TO MAKE IT EASIER TO SEE THE RINGING CONTROL LINE.
ALSO SHOWN IS A GREAT EXAMPLE OF PEAK EYE. THE TOP LINE OF THE EYE FORMS A SIMPLECONTROL LINE AT THE PEAK AND WE SEE THE PEAK REFLECTION LINE EASILY STOP PRICE THE DAY BEFORE THE LAST PEAK. COINCIDENTALLY, THE INTERSECTION OF THE EYE WITH A CONTROL LINE REFLECTION INDICATED THAT PRICE WOULD TRAVEL DOWN TO THE BASELINE BEFORE RISING FURTHER.
PRICE SHOULD OSCILLATE AROUND THE CONTROL LINE UNTIL IT REACHES THE POINT WHERE THE CONTROL LINE MEETS THE EYE. AT THAT TIME, PRICE WILL REBOUND STRONGLY OR IT WILL DROP OUT OF THE CURRENT TRADING CHANNEL.
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.73
2.50
2.00
1.50
1.00
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct


SINGLE-WICK EYE OF SAURON
THE SINGLE-WICK EYE OF SAURON IS ALWAYS DRAWN AFTER THE PEAK USING A SINGLE CANDLE WICK AS THE SOURCE. SHOWN ARE TWO CONFIGURATIONS.
IN BOTH, THE TOP RAIL IS A CONTROL LINE. IT DOESN'T MATTER WHICH TYPE OF CONTROL LINE WE FIND. ANY CONTROL LINE MAY BE THE TOP RAIL OF THE EYE.
IN EYE 1, WE SEE A SIMPLE CONTROL LINE FOR THE TOP RAIL. THE BOTTOM RAIL CLIPS THE PEAK OF THE DAY IMMEDIATELY PRECEDING THE PEAK OF THAT RISE. THIS VERIFIES THE EYE IS REAL.
IN EYE 2, WE SHOW A PEAK-PEAK CONTROL LINE AS THE TOP RAIL. THIS LINE SERVES ALSO AS LOCAL PEAK RESISTANCE LINE. WE SEE THAT THE ENTIRE WICK OF THE CURRENT PEAK CANDLE MIRRORS THE WICK OF THE SOURCE CANDLE. THIS VERIFIES THE EYE IS REAL.
SOURCE WICK
EYE 2
EYE 1
TOP RAIL PEAK AND BOTTOM RAIL OPEN OF NEXT DAY
ENTIRE WICK MIRRORS SOURCE
PEAK-PEAK CONTROL LINE
SIMPLE CONTROL LINE
THROUGH THE PEAK
4.50
4.25
4.00
3.75
3.50
3.25
3.00
2.75
2.61
2.50
2.25
2.00
1.75
Mar
Apr
May
Jun
Jul
Aug


FCEL
2014
CROSSPEAK EYE OF SAURON
THE CROSSPEAK EYE OF SAURON SPLITS THE SOURCE ACROSS THE PEAK. CROSSPEAK EYES MUST BE DRAWN USING PRICE POINTS WITHIN ONLY ONE OR TWO DAYS OF THE PEAK AND CAN NEVER EXCEED FIVE DAYS FROM STARTING WICK TO LAST WICK. PRICE POINTS ONTHIS CHART ARE FOUR DAYS AWAY FROM EACH OTHER. NOTE THAT EACH POINT MUST BE RELATIVELY CLOSE IN PRICE. THE FURTHER THE SPREAD BETWEEN PRICES, THE LESS CHANCE OF FINDING AN EYE.
EYE 1 SHOWS THE TOP RAIL AS A SIMPLE CONTROL LINE. THE BOTTOM RAIL IS PARALLEL ALMOST PERFECTLY CLIPS THE WICKS ON THE DAYS WHICH SET THE CONTROL LINE. LATER, THE PRICE IS REJECTED EXACTLY AT THE LOWER RAIL TWICE. FINALLY THE LAST CANDLE BELOW THE EYE SHOWS A COMPLETELY ENGULFED WICK, INDICATING THAT THE EYE MAY BE PLAYED OUT.
EYE 2 SHOWS A PEAK-PEAK CONTROL LINE AS THE TOP RAIL AND ALSO AS LOCAL PEAK RESISTANCE. THE LOWER RAIL IS DRAWN PARALLEL AND CAN BE SEEN TO REJECT PRICE ONLY ONCE, BUT THAT ONE A VERY HARD TOUCH AND DROP. WHEN PRICE FINALLY JUMPS OVER, THE LOWER WICK OF THE JUMPING CANDLE IS COMPLETELY ENGULFED INDICATING THE PROBABLE END OF THE EYE'S INFLUENCE.
PEAK-PEAK CONTROL LINE
TOUCH AND DROP LOWER RAIL
SIMPLE CONTROL LINE
LOWER WICK ENGULFED
ENGULFED UPPER WICK
4.50
4.25
4.00
3.75
3.50
3.25
3.00
2.75
2.61
2.50
2.25
2.00
1.75
Mar
Apr
May
Jun
Jul
Aug


BLOP
2014
THE REFLECTED EYE
REFLECTED EYES ARE SHOWN ALONG WITH THEIR ASSOCIATED REFERENCE CONTROL LINES. NOTICE REFERENCE LINE 1 APPEARS TO BE A PART OF AN EXTENDED FALL CHANNEL. REFERENCE LINE 2 APPEARS TO BE THE BOTTOM RAIL OF THE 'TURNING' CHANNEL IN AN EXTENDED FALL. AND REFERENCE LINE 3 IS THE FALL CHANNEL CONTROL LINE.
EACH OF THESE REFERENCE LINES IS A CONTROL LINE IN ITS OWN RIGHT. AND EVERY ONE OF THEM CAN AND DID CREATE AN EYE DURING THE RINGING PHASE. LESSON TO LEARN: EXTENDED FALL CHANNELS WILL [ROBABLY HAVE MULTIPLE EYES DURING THE RINGING PHASE.
KNOWING THIS WILL HELP YOU TO TIME YOUR TRADES MORE EFFECTIVELY.
EYE 1
EYE 2
EYE 3
REFERENCE LINE 1
REFERENCE LINE 2
REFERENCE LINE 3
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.87
3.50
3.00
2.50
Mar
Apr
May
Jun
Jul
Aug


FCEL
2014
SIMPLE PEAK EYE OF SAURON - EX 1
THE SIMPLE PEAK EYE IS ALWAYS DRAWN AS A PEAK RESISTANCE LINE WITH A COMPANION LINE DRAWN PARALLEL, LEAVING THE PEAK CANDLE AT THE BOTTOM OF THE UPPER WICK. IT GENERALLY APPEARS AS THE RINGING PHASE IS COMING TO AN END. ONCE IT APPEARS HOWEVER, IT CAN REAPPEAR WITH LESSER SLOPED LINES AS PRICE MOVES UP AFTER THE RINGING HAS COMPLETED.
THIS PEAK SAURON'S EYE SHOWS THE LOWER RAIL SERVING AS AN EXTENDED SIMPLE CONTROL LINE FROM THE PEAK IMMEDIATELY PRIOR. WHEN YOU SEE A SIMPLE CONTROL LINE THIS FAR OUT FROM THE PEAK, YOU MIGHT PLACE THE UPPER RAIL ON THE CHART THEN AND LOOK AT IT AS A POSSIBLE FUTURE PEAK RESISTANCE LINE. IF PRICE MOVES THROUGH IT LIKE IT WASN'T EVEN THERE, THEN YOU DO NOT HAVE A TRUE EYE. IF IT RECOILS AWAY FROM THE LINE, THEN YOU KNOW THE EYE IS REAL AND CAN PLAN ACCORDINGLY.
CONTROL LINE REFLECTION
PEAK RESISTANCE
SIMPLE CONTROL LINE
4.75
4.50
4.25
4.00
3.75
3.50
3.25
3.00
2.81
2.50
2.25
2.00
1.75
Apr
May
Jun
Jul
Aug


SIMPLE PEAK EYE - EX 2
THIS PEAK EYE SHOWS THE UPPER RAIL AS A SIMPLE CONTROL LINE EXTENDING BACK IN TIME TO THE PEAK ABOUT 18 MONTHS AGO. THIS IS A GREAT EXAMPLE OF HOW A PEAK EYE CAN SEEM TO MATERIALIZE OUT OF THIN AIR, TAKING TRADERS BY SURPRISE.
NOTE THAT THE FIRST TWO ATTACKS ON THE EYE FAILED AND THE THIRD ATTACK IS UNDERWAY. IT IS NOT UNCOMMON TO SEE PRICE OVERCOME THE EYE ONLY TO FALL BACK INTO ITS GRIP SEVERAL DAYS LATER.
THE EYE IS ALWAYS THE STRONGEST FORCE ON ANY MODEL. IT WILL ALWAYS TRY TO DESTROY THE CURRENT UPTREND. INMOST CASES THE EYE IS EVENTUALLY DEFEATED BUT IT CAN TAKE THREE TO FIVE ATTEMPTS TO FIND VICTORY.
18.00
17.00
16.00
15.00
14.00
13.00
12.00
10.92
10.00
9.00
8.00
7.00
6.00
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan
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May
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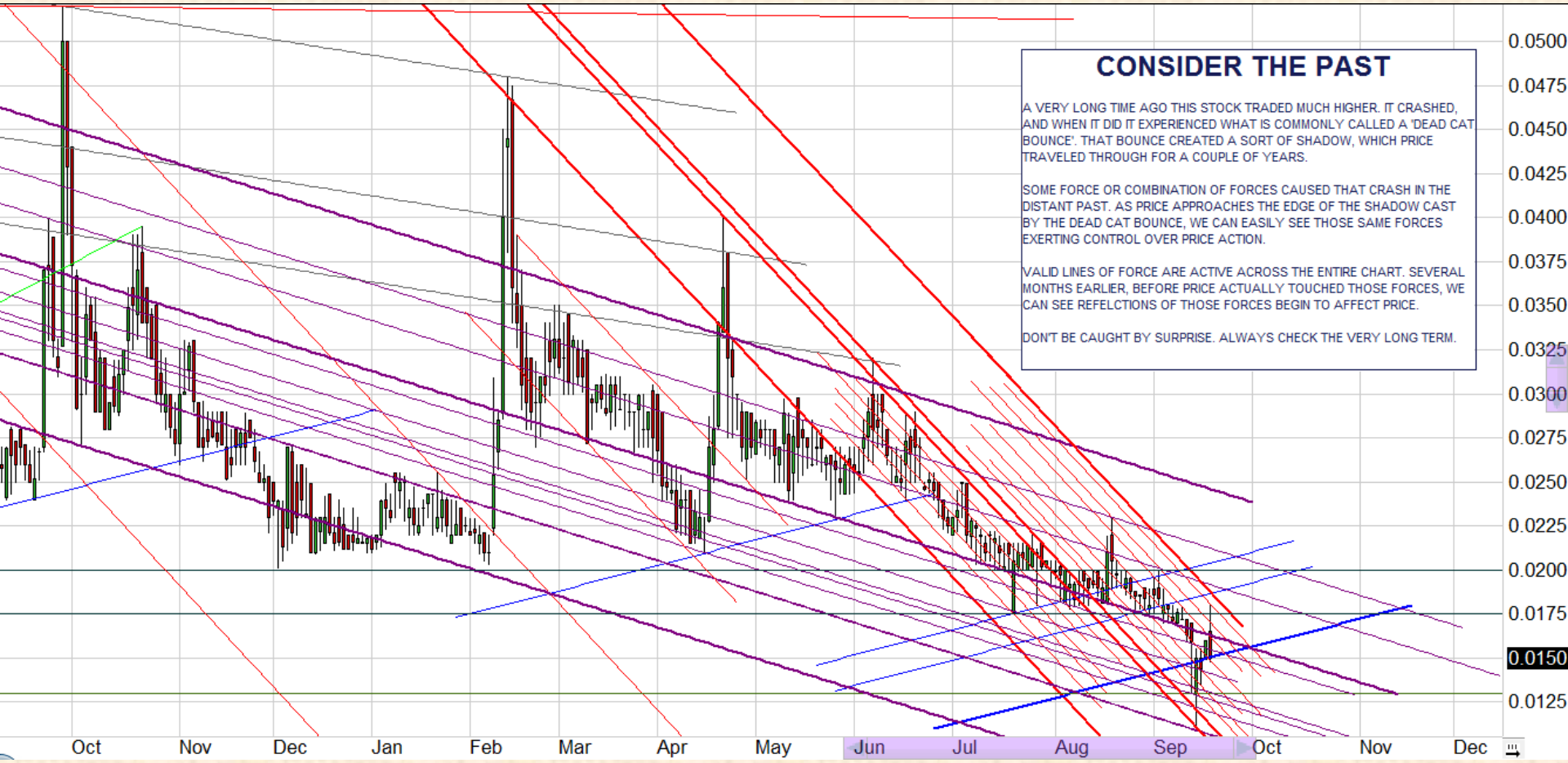
Jul
Aug
Sep
Oct


CONSIDER THE PAST
A VERY LONG TIME AGO THIS STOCK TRADED MUCH HIGHER. IT CRASHED, AND WHEN IT DID IT EXPERIENCED WHAT IS COMMONLY CALLED A 'DEAD CAT BOUNCE'. THAT BOUNCE CREATED A SORT OF SHADOW, WHICH PRICE TRAVELED THROUGH FOR A COUPLE OF YEARS.
SOME FORCE OR COMBINATION OF FORCES CAUSED THAT CRASH IN THE DISTANT PAST. AS PRICE APPROACHES THE EDGE OF THE SHADOW CAST BY THE DEAD CAT BOUNCE, WE CAN EASILY SEE THOSE SAME FORCES EXERTING CONTROL OVER PRICE ACTION.
VALID LINES OF FORCE ARE ACTIVE ACROSS THE ENTIRE CHART. SEVERAL MONTHS EARLIER, BEFORE PRICE ACTUALLY TOUCHED THOSE FORCES, WE CAN SEE REFELCTIONS OF THOSE FORCES BEGIN TO AFFECT PRICE.
DON'T BE CAUGHT BY SURPRISE. ALWAYS CHECK THE VERY LONG TERM.
0.0500
0.0475
0.0450
0.0425
0.0400
0.0375
0.0350
0.0325
0.0300
0.0275
0.0250
0.0225
0.0200
0.0175
0.0150
0.0125
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

Glossary of Terms

BIAS – Attempts to measure in an indirect way how much manipulation is being applied to the stock.

CCI – Commodity Channel Index is a tool to help determine if a stock is overbought or oversold.

Candle – The candle is the basic unit of price on the model. Consists of four data points: Open, Close, High, and Low.

Channel – An area bounded by parallel lines of force, through which price oscillates through over time.

Control Line – A coincidental line which appears to lead price downward to a support rail in a channel, after which price will either rise into or fall from the channel. Accurately determines price and time for one or two days only.

Derivative – As used herein, any tool derived from raw data other than the raw data itself.

Doji – A candle which shows the Open and Close as one price, with wicks both above and below.

The Eye– A particularly tough area of resistance formed by the uncertainty of previous peaks, as shown in the top wicks of the peaks. The Eye exposes that uncertainty in the length of the wicks of sub peaks that follow.

Fall Channel – The downward channel in which price remains confined during the immediate blow off from a parabolic rise in price.

HFT – High Frequency Trading, millions of orders rapidly submitted and cancelled by machine in an attempt to manipulate the margin of price action for profit. Illegal under the law, but hey, it makes the rich richer, so nobody is prosecuted.

Lines Of Force – The method of plotting turbulence between forces acting on price across time.

MACD – Moving Average Convergence Divergence shows a relationship between moving averages.

Nexus – The point where many lines of force intersect. Sometimes acts as an attractor to price. Still under investigation.

Peak Resistance – A downward line indicating a maximum rise for price during the ringing phase.

RSI – Relative Strength Index attempts to determine if a stock is overbought or oversold.

Ringing Phase – A period after a parabolic rise and subsequent blowoff, when price rises and falls several times before either resuming its previous rise, or beginning a new descent.

Wedge – An artifact created by the top rail of a downtrend channel and the baseline of an uptrend channel.

Wick – The thin line above and below the body of a candle on a chart or model. Shows trades above and below the Open and Close and may indicate indecision or uncertainty in the price.

Thanks for reading this little ebook. I hope it has helped and continues to help you make better trading decisions. I also hope you'll recommend it to your friends and family.

On this page are some links to some of the stocks I have used in my initial study – feel free to browse them in order. See how my models evolved as different forces took control of the price at different times. Click the links on the right to go there.

Practice makes perfect. So practice. Make models of stocks you do not own. Every time you get interested in a stock, make a model. Can't sleep? Make a model. Nothing on the tube and the web is just a re-run? Make hundreds of models. Get good at it.

And remember: this method is still being developed. While you are studying and perfecting your Lines of Force skills, you may be the one who discovers a new rule, a new artifact, or a new way to use the method.

Share it with the community! Tell us about it so we can test it with you, find its limitations and its surprises. Together we can perfect this method and expand on it.

Buyers of this ebook will have a place to get together with other folks working with Lines of Force. That place is **LinesOfForce.net** and it will be available starting October 1, 2014. We'll have a private place to post our models, give and get feedback on our work, and generally just perfect our abilities. I'll be there as much as possible to help out and post my own models for your critique. I hope you'll join us there. Here's your password to the forum: KittyKosh.

Stock Models

AAPL
BBRY
BDSI
BLDP
EVRY
FCEL
KNDI
MNGA
MNKD
PLUG
RGSE
WEST
YGE

About the Author

Jon grew up on a farm in North Carolina during the 60s and 70s. Though he loves writing in general, he hates writing about himself in the third person, but here he is doing it anyway. He's spent more than five years sitting in college classrooms but he never matriculated anywhere, so he never applied for a degree. He spent six years in the military working in a laboratory, wearing a white coat, walking through airlocks all day. He is the awed father of twin sons. He back-dived into two feet of water and hit his head, causing a five year span of amnesia. He started and ran a successful computer services company until illness almost killed him in 2009. In 2013 he was pronounced cured and six months later suffered a heart attack. This is what gave him the time and inclination to work out the Lines of Force method, to test it and present each model publicly on StockTwits as the method was developed. And the response from that community is what prompted him to write this little book. He wants you all to know how to do this. He wants his work to count, for all of us, as a net gain. He wants last of all to thank you and say, Good luck to you.