An explanation of the "sine wave" frame as used in the "forex-filter"

If you haven't taken the time to look at each of the twenty mini-charts in **somepracticeshots3.doc** you are doing yourself a serious dis-service. These are real life examples that illustrate **all** of the major concepts of the "sine wave" charts.

I have also attached **somepracticeshots4.doc.** This shows the twenty pairs that I follow – but I selected the best examples of the techniques I have been writing about without regard for chronological continuity.

While a true sine wave can be very loosely defined as "a wave–like function of time having amplitude," I chose to use that term **ONLY** because it best describes the three visual characteristics of ***oscillator***, ***center line***, and ***crossover***. Yes, I know it is not really a true *sine wave*, so please don't send me hate mail.

Please do not confuse the "sine wave" charts discussed here with ***Raghee's 34-bar 3-line XMA wave chart*** that was illustrated in the previous post.

The **StochD** values in all displays are (14,3,3) and may appear labeled differently in some of the (previous and present) attachments. These values are not that critical. Sorry for any confusion this may have caused.

Some background

I can discuss only **two** of the **three** indicators of this "sine wave" frame intelligently. As I explained in my previous post, the

proprietary function, "**D3PO WDelta**," authored by Brian Latta, can be found in the *Genesis Trade Navigator* community; I do not have his algorithm to share with you.

The two indicators/functions I will discuss here are the **MACD Diff** and the **StochasticD**. For an in-depth education on these two indicators, I suggest you visit www.stockcharts.com and www.atradersuniverse.com.

For years I have been warned that the **MACD** only works in **trending markets** and that the **Stochastic** oscillator only works in **"banded"** or **"range-bound"** (i.e., prices bouncing between support and resistance) markets – and, similar to oil and water – they cannot be mixed. **But, I did (later) learn that they could be mixed, even superimposed, on the same chart.**

See SHOW_SINE.DOC attachment

I was not able to "stack" all five mini-charts in one vertical column. I tried, but *Microsoft Word* would not cooperate.

There are five mini-charts in the **SHOW_SINE.DOC** attachment. The upper-left mini-chart is the "sine wave" chart frame exactly as it would appear in a *cornflower* chart. Below that is the un-modified **MACD Diff** histogram chart. Below that is the un-modified **StochD** step-line chart. The upper-right mini-chart is the un-modified **D3PO WDelta** step-line chart. Below that is a barebones chart of the "arrowheads" overlay chart.

Let me explain why I developed the "sine wave" chart:

1) I am a visual person. *One chart is worth a thousand words.*
2) My eyeballs were getting vertically and horizontally whip lashed from trying to watch so many redundant

indicators on so many charts; twenty pairs with five time frames each.
3) Screen real estate is always at a premium.
4) The platform that I use encourages creativity and allows a seemingly unlimited number of (custom or in-house) indicators to be overlaid on the same chart.
5) The platform that I use has user-definable quote boards with alarms/alerts (audio/visual) for user-definable conditions.

As you examine the upper-left "sine wave" chart, you will see the indicator lines (and histogram) from the three successive charts embodied within it. What should be immediately apparent is that all three of the successive charts have **dissimilar** value ranges. For the chart time period of 0730 CST to 1043 CST the **MACD Diff** had a high-low range of 0.000226 to -0.000207, the **StochD** had a high-low range of 88.02 to 6.8944, and the **D3PO WDelta** had a high-low range of 0.00044 to -0.000651.

As you have learned about the **Stochastic** oscillator, its base is **not** zero, but rather the base is +50 (+80 is considered overbought and +20 is considered oversold). I simply subtracted 50 and arrived at base zero. I do not care about overbought and oversold with this method; I am only looking for a 12 PIP move.

Next, to convert the negative values to positive (red) values, I wrote a simple algorithm that converted any negative value into an absolute (positive) value. So what you see in the "sine wave" frame is actually six different mini-programs.

As mentioned previously, all three indicators have dissimilar value ranges. Fortunately, the platform has a "scale not fit to pane" feature that permits dissimilar indices to be super-imposed over one another; since I felt that the **MACD Diff** was the most important of the three (and *it* was the histogram), I used *it* as the

index base. The platform also has a large palette of colors (and shades) and has many selectable line widths and line styles.

So what you see in **a** "sine wave" frame is a **MACD Diff** histogram, a medium thickness **StochD** step-line, and heavier thickness **D3PO WDelta** step-line.

It is important to understand exactly what "scale not fit to pane" means. Each indicator in the frame is independent (not co-dimensional) and mutually exclusive. Only the histogram (by my choice) is indexed to the gradients shown in the right margin. Each of the three indicators will, for only the time period observable on the screen, display its highest value (line) near the top of the frame. Ignore the right margin gradients for this frame.

I chose to use the "step" style of line because of its ability to sharply define and illustrate bar-to-bar changes. I dislike standard lines for this purpose because they tend to "smooth" out important contrasts and "mask" out transparencies.

The last mini-chart is the array of applicable arrowheads. In the previous post I explained that an arrowhead appears (my visual thing, again) only when ALL three "sine waves" cross the zero base within three bars of one another. A "bounce" (i.e., when the line approaches the zero base, does not cross, and returns into the direction whence it came), while as important as a cross, does not merit an arrowhead.

Remember you do not **NEED** an arrowhead (or a bounce) as a trade set-up or trigger. More often than not, the **MACD Diff** histogram will be the **first** of the three "sine waves" to appear. The **MACD Diff** histogram generally appears **several bars prior** to the appearance of the (72x8) vertical black line (see **somepracticeshots4.doc** for more examples).

The “sine waves” serve (a minimum of) two purposes – they can show the anticipated near-term future direction **and** they can be set-up/trigger indicators. The previous post demonstrated how the (72x8) vertical black lines, in conjunction with the diamonds on the Bollinger Band Width line and the cross/bounce on the “sine waves” field, were possible triggers.

I personally feel that the greatest part of a “move” is over when (if) the **MACD Diff** gets vertically “too” high (green or red). What is “too” high? It is subjective; that is something you will learn to recognize for yourself as time goes by.

I have included **SHOW_SINE_A.DOC** to show you an occurrence of a “sine same bar.” On that chart, at 1020 CST, that black bar indicates that all THREE “sine waves” crossed zero on the same bar; a rare, but generally explosive, event.

I hope I answered the question that you asked.

Readers' Digest **version ->**

The **MACD Diff** histogram will generally display the color (i.e., direction) of the movement expected after the next (72x8) vertical black line in the price bars. It is worth noting that price direction remains valid (as evidenced by the orientation of 8, 12, 24 bar XMAs relative to the 72 bar XMA (i.e., past, present, future). In these instances, in the absence of a vertical black (or a vertical red) line and a blue diamond and a histogram, one could expect the high likelihood of a continuing trend.

The best moves are when **all three** “sine wave” indicators move rapidly (steeply) and concurrently upward. Take the time and examine the accompanying charts for these instances.

Remember from my earlier post when I said that trade set-ups and triggers are a series of "**AND**" conditions? Only after I check the trend direction, **AND** the Bollinger Band Width "diamonds," **AND** the next longer bar term chart (e.g., 5-minute bar chart), will I even consider looking at the "sine wave" chart. The "sine wave" chart is also the best "**OR**" condition indicator on the screen; if the trend is changing, this should be your signal.

* * *

For **SHOW_SINE_A.DOC** I chose the **NZDUSD**, a slow moving pair. Made even slower by virtue that New Zealand closed shop for the weekend thirteen hours earlier, it was a Friday, and it was the day after Thanksgiving in the USA. Even with all of these shortcomings, there were several potential 12 PIP set-ups.

As you review the attachments, you will understand how you can analyze twenty charts in less than eight seconds.