## C $\quad \begin{array}{lllllll} & A & P & T & E & R & \end{array}$

## WaveRatios andMeasurements

## Lengths

The price distance of each wave is measured as a vertical distance from the beginning of the wave to the end of the wave. The length is measured in price points or units.

In the examples below, the length of each wave is indicated by the length of its corresponding arrow.


## Fibonacci Ratios of Waves

## Fibonacci Ratio Background

Fibonacci ratios are mathematical ratios derived from the Fibonacci sequence. The Fibonacci sequence is the work of Leonardo Fibonacci, circa 1180 CE. The Fibonacci sequence is used in many applications, including engineering, space studies, stock market actions, and many other fields. This is all the information one needs as to the origin of the Fibonacci ratios, at least for trading purposes. The most common Fibonacci ratios used in the stock markets are:

| 1 | -1.618 | - | 2.618 | -4.23 | -6.85 | (multiples) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 0.14 | -0.25 | -0.38 | -0.5 | $\&$ | 0.618 | (ratios) |

The ratios used in this manual slightly deviate from the standard Fibonacci ratios listed below. These deviated ratios best fit the short-term wave pattern.

The first wave in an Elliott sequence is Wave 1. The measurement of Wave 1 is used to find ratios of other waves. These ratios are not rules, but guidelines in estimating the lengths of different waves.

## Ratios for Wave 2

## Fibonacci Rule for Wave 2:

Wave 2 is always related to Wave 1.

## Common Ratios for Wave 2:

Wave 2 = either $50 \%$ of Wave 1 or $62 \%$ of Wave 1


## Ratios for Wave 3

Wave 3 is related to Wave 1 by one of the following:
Wave 3 = either 1.62 x length of Wave 1
or 2.62 x length of Wave 1
or 4.25 x length of Wave 1
The most common multiples are 1.62 and 2.62. However, if the $3^{\text {rd }}$ Wave is an extended wave, then 2.62 and 4.25 ratios are more common.


## Ratios for Wave 4

Wave 4 is related to Wave 3 by one of the following:
Wave 4 = either $24 \%$ of Wave 3
or $38 \%$ of Wave 3
or $50 \%$ of Wave 3
The $24 \%$ and $38 \%$ are the most common ratios for Wave 4.


## Ratios for Wave 5

Wave 5 has two different relationships. Both are shown below.
If Wave $\mathbf{3}$ is greater than $\mathbf{1 . 6 2}$ or extended, then Wave 5 ratios are as follows:

Wave 5 either = Wave 1 or
$=1.62 \times$ Wave 1 or
$=2.62 \times$ Wave 1


If Wave 3 is less than 1.62, Wave 5 ratios are as follows:
When Wave 3 is less than 1.62 , the $5^{\text {th }}$ Wave overextends itself. From research, the ratio of Wave 5 will be based on the entire length from the beginning of Wave 1 to the top of Wave 3.
Extended Wave 5 = either 0.62 x length
(beginning of Wave 1 to top of Wave 3) or
= length of
(beginning of Wave 1 to top of Wave 3) or
$=1.62 \mathrm{x}$ length of
(beginning of Wave 1 to top of Wave 3)


## Elliott Channels for Top of a Wave 5

Once the $5^{\text {th }}$ Wave starts, the Elliott Channel Technique can be used to project the end of the $5^{\text {th }}$ Wave. Once Wave 4 has been completed, draw a straight line between Waves 2 and 4.


Now draw two lines parallel to the lower channel line connecting the tops of Waves 1and 3.


Expect Wave 5 to end on one of the two upper channel lines. Usually, if Wave 3 was a normal wave, Wave 5 tends to end on the channel drawn from the Wave 3 top. If Wave 3 was extended and a runaway type of wave, Wave 5 tends to end on the channel drawn from the top of Wave 1.

## Statistical Analysis of Wave 2 Ratios



Wave 2 Ratio


Figure 10-1: Daily Chart, Alcoa

In the Alcoa Inc. (AA) chart above, Wave 2 retraced between 50\% and 62\% of Wave 1.

## Statistical Analysis of Wave 3 Ratios



## Wave 3 Ratios



Figure 10-2: Daily Chart, Alcoa
In the Alcoa Inc. (AA) chart above, Wave 3 wound up between 1.618 and 2.618 of Wave 1.

## Statistical Analysis of Wave 4 Ratios



More than 62\% Retracement of Wave 3=10\% of the time

## Wave 4 Ratios



Figure 10-3: Daily Chart, Alcoa
In the Alcoa Inc. (AA) chart above, Wave 4 retraced between $24 \%$ and $38 \%$ of Wave 3.

## Elliott / Fibonacci Ratios

Wave 5
Extended if Wave 3 is less than 1.62 X Wave One
$5=.62$ X Length of 0 to 3
$5=1$ X Length of 0 to 3
$5=1.62 \mathrm{X}$ Length of 0 to 3


## Elliott / Fibonacci Ratios for Wave 5



Figure 10-4: Daily Chart, Alcoa

Even when Wave 3 is extended, our research has found that the Wave 5 sequence will often end inside the ratios calculated from $0-3$ where 0 (Zero) is the start of Wave 1. This is the start of the new Five-Wave sequence. The length of $0-3$ is extended from the end of Wave 4.

Wave 5 usually ends inside the windows of $62 \%$ of $0-3$ and equal to $0-3$ added to the end of Wave 4.

## Notes

