## M AND W WAVES - MORE DATA

August 19, 1984

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In the February, 1980, *Market Technicians Journal*, a method was outlined for positively identifying five point wave patterns. One of 32 possible labels could be unequivocally attached to any wave.

Since the identification is precise and definite, the historical record can then be searched for identical patterns. The market performance after each pattern can be noted to see if the pattern has a bullish or a bearish bias.

Since the 1980 article, I've noted and classified some 2000 patterns of the moves of individual stocks. The results are in the following paragraphs. In addition, a method will be noted for translating point and figure charts into the wave classification.

## THE CLASSIFICATION:

The first step in classification is to establish a boundary line. The minimum swing size is specified; all waves of a smaller magnitude are ignored or filtered out. The remaining waves are considered through a span of five turning points. See Figure 1. If the first swing is downward, the patterns form a W; if the first swing is upward the pattern forms an M. In Figures 2 and 3 I've classified all possible patterns as 16 M and 16 W patterns.

Positive identification is possible by a method suggested by Robert Levy in 1971. Rank the points from 1 for the highest to 5 for the lowest; read the ranks from left to right and you have a five digit identification number.

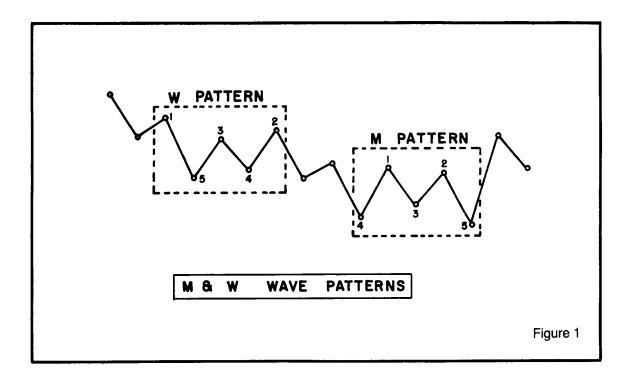
### THE TEST:

To check the patterns, they were considered in pairs. The left-hand pattern in each pair was the forecasting pattern; the right-hand pattern described behavior following the forecasting pattern. The right-hand pattern was considered bullish behavior if its far right-hand point was higher than its far left-hand point. If the far right-hand point was lower, it was considered bearish behavior. For example, M1 is a bearish period; M10 is a bullish period.

It was then a simple job for the computer to count the number of bullish and the number of bearish periods following each pattern. The result is in Figure 4, which tabulates the performance of 2036 common stock M and W waves, using a 10 percent filter. For example, the M1 pattern was found 57 times. On 24 occasions the next pattern was a rising or bullish period; it was a declining or bearish period on 33 occasions. The bullets mark significance at the 95 percent confidence level.

## POINT AND FIGURE CLASSIFICATION:

Point and Figure charts can be classified as M and W waves. The minimum wave size, in the case of Point and Figure, is in terms of points, rather than percentage. See Figure 5. The left-hand chart is a point and figure chart for AMR Corporation (source: Chartcraft). Note the three high turning points A,C,E and the two low turning points B,D. At the right these points are charted without the intermediate X and O columns. If the points are ranked, the classification 15243 identifies the wave as a W4 wave. In table Figure 4, this wave was found 33 times; 26 times it was followed by a rising wave; 7 times by a declining wave. It evidently has a bullish bias. This was acknowledged in the AMR chart by a fine rising column of Xs.



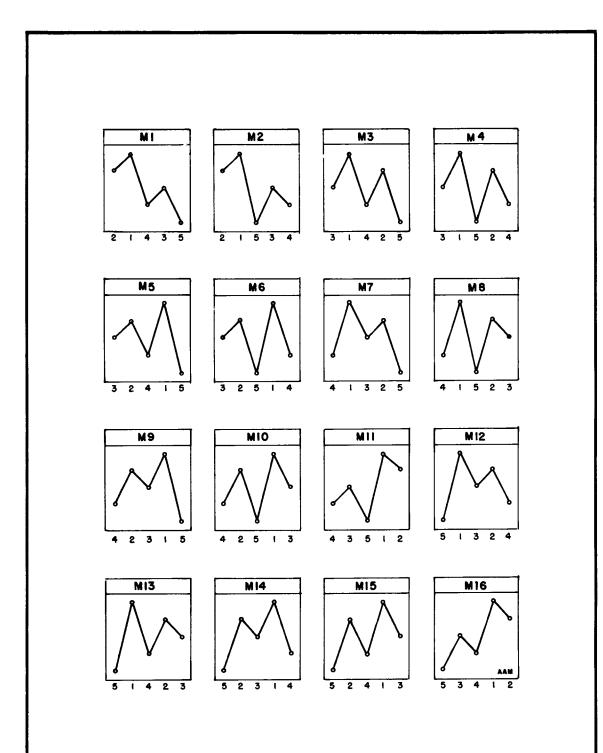
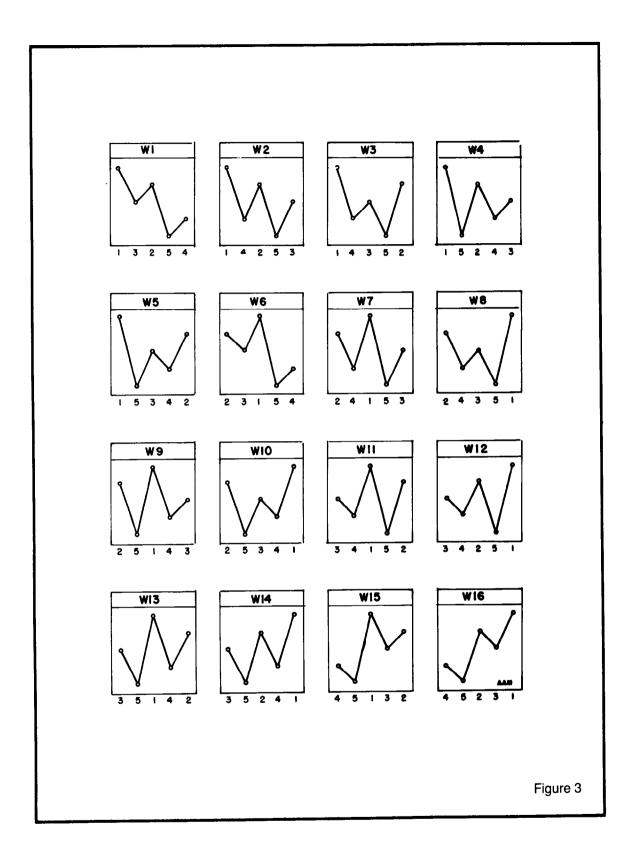


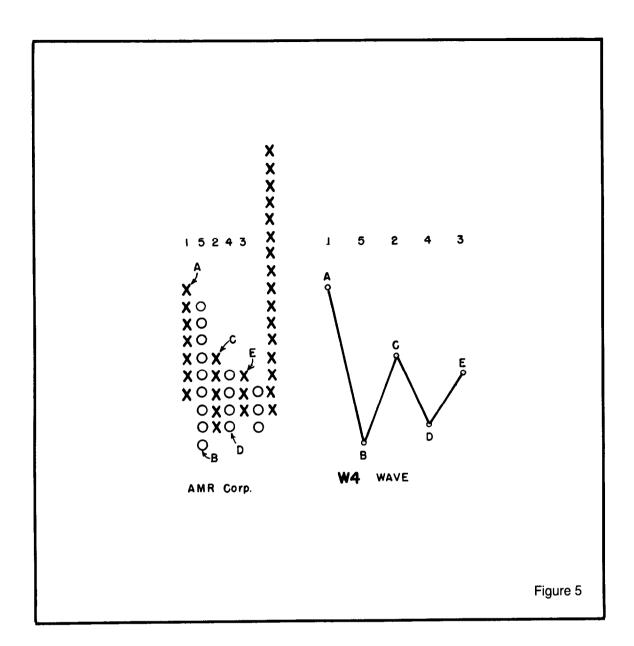
Figure 2



#### M WAVES WAVE UP DWN %UP M 1 24 33 42.11● M M 15 22 2 40.54● 3 4 5 68 42 61.82 M 37 34 52.11 M M 19 20 48.72 6 10 13 43.48 M 7 38 16 70.37● M M M 66.67 50.00 60.98 51.11 8 14 7 24 25 9 24 10 16 M 11 23 22 М 42 58.33 12 30 М 13 40 15 72.73**•** M 14 29 22 56.86 M M 15 105 16 64 80 56.76 36 64.00

W WAVES				
WAVE		UP	DWN	%UP
W	1	34	30	53.13
W	2	66	59	52.80
W	3	30	26	53.57
₩	4	26	7	78.79●
W	5	36	31	53.73
W	6	14	15	48.28
W	7	33	29	53.23
W	8	27	29	48.21
W	9	16	10	61.54
W	10	47	33	58.75
W	11	11	7	61.11
W	12	18	21	46.15
W	13	48	29	62.34
W	14	84	62	57.53
W	15	27	22	55.10
W	16	58	42	58.00

Figure 4



# **BIOGRAPHY**

Arthur Merrill was awarded the coveted MTA annual award in 1977. Art is the publisher of *Technical Trends*, a statistical stock market service. He pioneered in the study of seasonal patterns of stock prices, and is the author of the book *Behavior of Prices on Wall Street*, *Seasonal Tendencies in Stock Prices*, *Bear Market Characteristics*, and *Market Indicators and Growth Company Earnings*. Among the indicators originated by Art is the ratio of ASE to NYSE volume, a device now used by many technicians as a gauge of speculative activity.