

Anatomy of a Trading Range

by Jim Forte

In the following article I will discuss the analysis of a Trading Range, employing terms and principles developed by Richard Wyckoff in the 1920s and 30s and more recently by the "Stock Market Institute". In technical analysis, there are a variety of methods used to analyze trading range formations and forecast the expected direction and extent of the move out of a trading range. Most practitioners of technical analysis, whether familiar with the Wyckoff method or not, will be able to relate many of the points and principles being discussed to those they are already familiar with.

Much of Wyckoff's analysis and working principles were based on what he identified as three fundamental laws:

1. *The Law of Supply and Demand*—which simply states that when demand is greater than supply, prices will rise and when supply is greater than demand, prices will fall.

2. *The Law of Cause and Effect*—postulates that in order to have an effect you must first have a cause, and that effect will be in proportion to the cause. This law's operation can be seen working, as the force of accumulation or distribution within a trading range works itself out in the subsequent move out of that trading range. Point and figure chart counts can be used to measure this cause and project the extent of its effect.

3. *The Law of Effort vs. Result*—helps us evaluate the relative dominance of supply vs demand, through the divergence or disharmony between volume and price, when considering relative strength, comparative price progress and trading volume.

An objective of Wyckoff analysis is to aid in establishing a speculative position in correct anticipation of a coming move where a favorable reward/risk ratio exists (at least 3 to 1) to justify taking that position. Trading Ranges (TR's) are places where the previous move has been halted and there is relative equilibrium between supply and demand. It is here within the TR that dominant and better informed interests conduct campaigns of accumulation or distribution in preparation for the coming move. It is this force of accumulation or

distribution that can be said to build a *cause* which unfolds in the subsequent move.

Because of this building of force or *cause*, and because the price action is well defined, trading ranges represent special situations that offer trading opportunities with potentially very favorable reward/risk parameters. To be successful however, we must be able to correctly anticipate the direction and magnitude of the coming move out of the trading range. Fortunately, Wyckoff offers us some guidelines and models by which we can examine a trading range.

A preview of the guidelines and model schematics presented here, along with the accompanying explanation of the terms and principles represented in the schematics, will go a long way to further the reader's understanding of the text.

It is through the identification and analysis of the price and volume action and certain principles in action within the various phases of the *trading range* (TR) that the trader can become aware and conclude that supply or demand is becoming dominant and correctly anticipate the coming move. It is through the analysis of the *phases* of the TR that we can distinguish accumulation/reaccumulation from distribution/redistribution.

The Wyckoff method employs bar charts along with certain terms and principles in action to determine the expected direction and timing of a coming move. It also employs point and figure chart counts to aid in projecting the extent of the move.

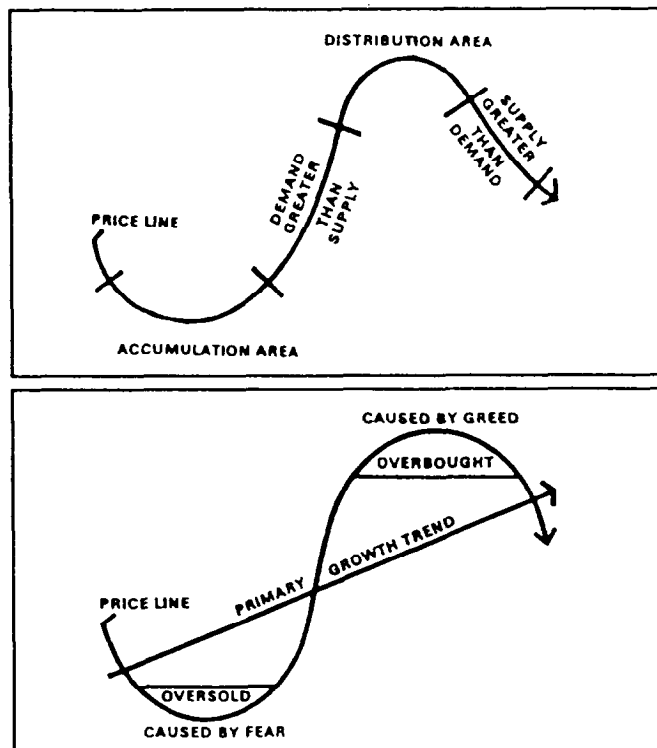
For those interested in exploring the use of point and figure charts, references are available from the Wyckoff "Stock Market Institute" (SMI) and from other sources on technical analysis. Our emphasis here will be primarily on the analysis of bar chart formations.

The following illustrations represent an idealized Wyckoff model of market cycles involving supply and demand, accumulation and distribution, and a conception of the primary market phases.

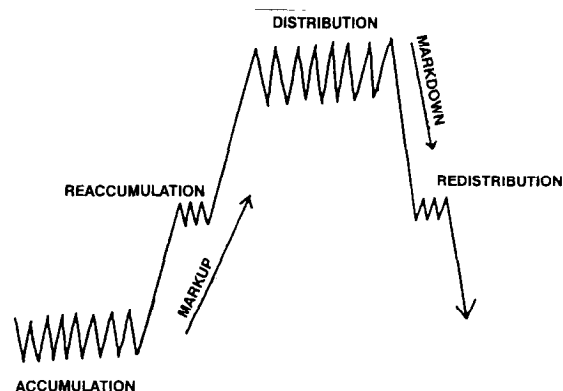
Accumulation

Schematic 1 is a basic Wyckoff model for accumulation. While this basic model does not offer us a

Idealized Cycle



Conception of Primary Market Phases



Accumulation: The establishment of an investment or speculative position by professional interests in anticipation of an advance in price.

Markup: A sustained upward price movement.

Distribution: the elimination of a long investment or speculative position.

Markdown: A sustained downward price movement.

schematic for all the possible variations in the anatomy of the TR, it does provide us a representation of the important Wyckoff principles, often evident in an area of accumulation, and the identifiable phases used to guide our analysis through the TR toward our taking of a speculative position.

Phase A

In Phase A, supply has been dominant and it appears that finally the exhaustion of supply is becoming evident. This is illustrated in Preliminary Support (PS) and the Selling Climax (SC) where widening spread often climaxes and where heavy volume or panicky selling by the public is being absorbed by larger professional interests. Once exhausted an Automatic Rally (AR) ensues and then a Secondary Test (ST) of the selling climax. This Secondary Test usually involves less selling than on the SC and with a narrowing of spread and decreased volume. The lows of the Selling Climax (SC) and the Secondary Test, and the high of the Automatic Rally (AR) initially set the

boundaries of the trading range. Horizontal lines may be drawn here to help us focus our attention on market behavior in and around these areas.

It is also possible that Phase A can end without dramatic spread and volume, however it is usually better if it does, in that more dramatic selling will generally clear out all the sellers and clear the way for a more pronounced and sustained markup.

Where a TR represents *Reaccumulation* (a trading range within a continuing upmove), we will not have evidence of PS, a SC, and ST as illustrated in phase A of Schematic 1. Phase A will instead look more like Phase A of the basic Wyckoff distribution schematic (Schematic 2 or 3); but none the less, Phase A still represents the area of the *stopping of the previous move*. The analysis of Phase B through E would proceed the same as is generally advised within an initial base area of accumulation.

Phase B

In Phase B, Supply and Demand on a major basis are in equilibrium and there is no decisive trend. The

Accumulation Schematic

Phases A through E: Phases through which the Trading Range passes as conceptualized by the Wyckoff method and explained in the text.

Lines A and B... define support of the Trading Range.

Lines C and D... define resistance of the Trading Range.

(PS) Preliminary Support is where substantial buying begins to provide pronounced support after a prolonged downmove. Volume and spread widen and provide a signal that the downmove may be approaching its end.

(SC) Selling Climax... the point at which widening spread and selling pressure usually climaxes and heavy or panicky selling by the public is being absorbed by larger professional interests at prices near a bottom.

(AR) Automatic Rally... selling pressure has been pretty much exhausted. A wave of buying can now easily push up prices which is further fueled by short covering. The high of this rally will help define the top of the trading range.

(STs) Secondary Test(s)... revisit the area of the Selling Climax to test the supply demand balance at these price levels. If a bottom is to be confirmed, significant supply should not resurface, and volume and price spread should be significantly diminished as the market approaches support in the area of the SC.

The "CREEK" is an analogy to a wavy line of resistance drawn loosely across rally peaks within the trading range. There

are of course minor lines of resistance and more significant ones that will have to be crossed before the market's journey can continue onward and upward.

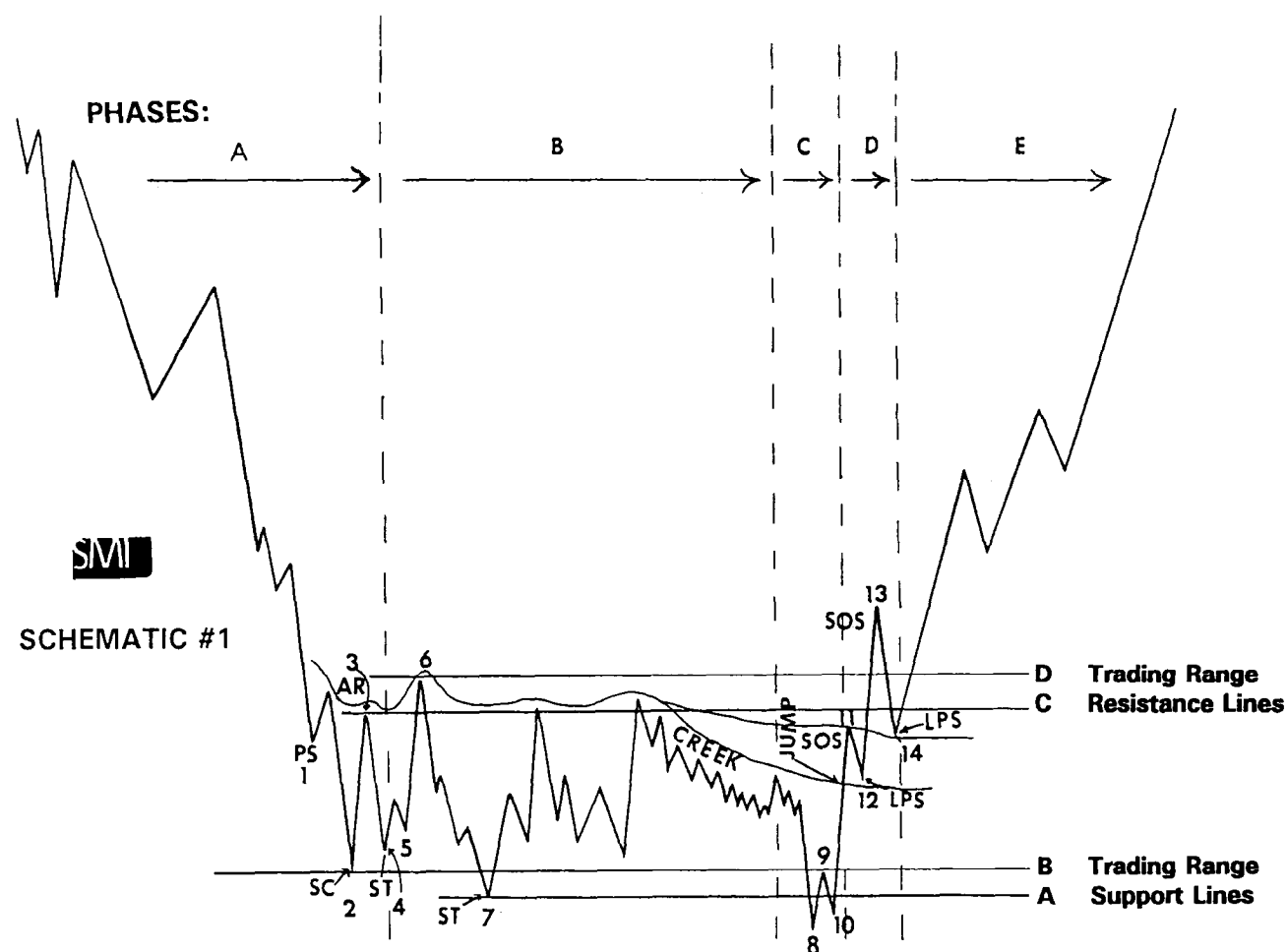
Springs or Shakeouts usually occur late within the trading range and allow the market and its dominant players to make a definitive test of available supply before a markup campaign will unfold. If the amount of supply that surfaces on a break of support is very light (low volume), it will be an indication that the way is clear for a sustained advance. Heavy supply here will usually mean a renewed decline. Moderate volume here may mean more testing of support and to proceed with caution. The spring or shakeout also serves the purpose of providing dominant interests with additional supply from weak holders at low prices.

Jump Across the Creek (JAC) is a continuation of the creek analogy of jumping resistance and is a good sign if done on good spread and volume—a sign of strength (SOS).

Sign of Strength (SOS)... an advance on good (increasing) spread and volume.

Back Up (BU) to a Last Point of Support (LPS)—a pull back to support (that was resistance) on diminished spread and volume after a SOS. This is good place to initiate long positions or to add to profitable ones.

Note: A series of SOS's and LPS's is good evidence that a bottom is in place and Price Markup has begun.



clues to the future course of the market are usually more mixed and elusive, however here are some useful generalizations.

In the early stages of Phase B the price swings tend to be rather wide, and volume is usually greater and more erratic. As the TR unfolds, supply becomes weaker and demand stronger as professionals are absorbing supply. The closer you get to the end or to leaving the TR, volume tends to diminish. Support and resistance lines, (shown as horizontal lines A, B, C, and D on the Accumulation Schematic 1) usually contain the price action in Phase B and will help define the testing process that is to come in Phase C. The penetrations or lack of penetrations of the TR enable us to judge the quantity and quality of supply and demand.

Phase C

In Phase C, the stock goes through a testing process. The stock may begin to come out of the TR on the upside with higher tops and bottoms or it may go through a downside *spring* or *shakeout*, breaking previous supports. This latter test is preferred, given that it does a better job of cleaning out remaining supply from weak holders and creates a false impression as to the direction of the ultimate move. Our Schematic 1 shows us an example of this latter alternative.

Until this testing process, we cannot be sure the TR is accumulation and must wait to take a position until there is sufficient evidence that mark-up is about to begin. If we have waited and followed the unfolding TR closely, we have arrived at the point where we can be quite confident of the probable upward move. With supply apparently exhausted and our danger point pinpointed, our likelihood of success is good and our reward/risk ratio favorable.

The shakeout at point 8 on our Schematic 1 represents our first prescribed place to initiate a long position. The secondary test at point 10 is better, since a low volume pullback and a specific low risk stop or danger point at point 8 gives us greater evidence and more confidence to act. A sign of strength (SOS) here will bring us into Phase D.

Phase D

If we are correct in our analysis and our timing, what should follow here is a consistent dominance of demand over supply as evidenced by a pattern of advances (SOS's) on widening spreads and increasing volume, and reactions (LPS's) on smaller spreads and diminished volumes. If this pattern does not occur, then we are advised not to add to our position and look to close our original position until we have more conclusive evidence that markup is beginning. If our stock progresses as

stated above, then we have additional opportunities to add to our position.

Our aim here is to initiate a position or add to our position as the stock or commodity is about to leave the trading range. At this point, the force of accumulation has built a good potential and could be projected by using the Wyckoff point and figure method (or perhaps another method of the reader's own choosing).

We have waited to this point to initiate or add to our positions in an effort to increase our likelihood of success and maximize the use of our trading capital. On our Schematic 1, this opportunity comes at point 12 on the "pullback to support" after "jumping resistance" (in Wyckoff terms this is known as "Backing Up to the Edge of the Creek" after "Jumping Across the Creek"). Another similar opportunity comes at point 14, a more important point of support and resistance.

In Phase D, the mark-up phase blossoms as professionals begin to move up the stock. It is here that our best opportunities to add to our position exist, before the stock leaves the TR.

Phase E

In Phase E, the stock leaves the TR and demand is in control. Setbacks are unpronounced and short lived. Having taken our positions, our job here is to monitor the stock's progress as it works out its force of accumulation. At each of points 8, 10, 12, and 14 we may take positions and use point and figure counts from these points to calculate price projections and help us to determine our reward/risk prior to establishing our speculative position. These projections will also be useful later in helping us target areas for closing or adjusting our position.

Remember our Schematic 1 shows us just one idealized model or anatomy of a trading range encompassing the accumulation process. There are many variations of this accumulation anatomy and we addressed some of these considerations earlier. The presence of a Wyckoff principle like a *selling climax* (SC) doesn't confirm that accumulation is occurring in the TR, but it does strengthen the case for it. However, it may be accumulation, redistribution or nothing. The use of Wyckoff principles and phases identifies and defines some of the key considerations for evaluating most any trading range and helps us determine whether supply or demand is becoming dominant and when the stock appears ready to leave the trading range.

Distribution

Accompanying our discussion of distribution are *Schematics 2* and *3*, two variations of the Wyckoff model for distribution. While these models only represent two variations of the many possible variations

in the patterns of a distribution TR, they do provide us with the important *Wyckoff principles* often evident in the area of distribution and the *phases* SMI uses to guide our analysis through the TR toward taking a speculative position.

Much of this discussion and analysis of the *principles and phases of a TR preceding distribution are the inverse of a TR of accumulation*, in that the roles of supply and demand are reversed.

Here, the force of "jumping the creek" (resistance) is replaced by the force of "falling through the ice" (support). Given this, I will not repeat all the points made earlier, but rather emphasize those areas where the differences merit discussion and where additional points need to be made or reemphasized. It is useful to remember that distribution is generally accomplished in a shorter time period as compared to accumulation.

Phase A

In Phase A, demand has been dominant and the first significant evidence of demand becoming exhausted comes at point 1 at Preliminary Supply (PSY) and at point 2 at the Buying Climax (BC). (See Schematic 2 and 3.) It often occurs on wide spread and climatic volume. This is usually followed by an Automatic Reaction (AR) and then a Secondary Test (ST) of the BC, usually on diminished volume. This is essentially the inverse of Phase A in accumulation.

As with accumulation, Phase A in distribution may also end without climactic action and simply evidence exhaustion of demand with diminishing spread and volume.

Where *Redistribution* is concerned (a TR within a larger continuing downmove), we will see the stopping of a downmove with or without climactic action in Phase A. However, in the remainder of the TR the guiding principles and analysis within Phases B through E will be the same as within a TR of a Distribution market top.

Phase B

The points to be made here about Phase B are the same as those made for Phase B within Accumulation, except clues may begin to surface here of the supply/demand balance moving toward supply instead of demand.

Phase C

One of the ways Phase C reveals itself after the standoff in Phase B is by the "sign of weakness" (SOW) shown at point 10 on Schematic 2. This SOW is usually accompanied by significantly increased spread and volume to the downside that seems to break the standoff in Phase B. The SOW may or may not fall through the Ice," but the subsequent rally back to point 11, a

"last point of supply" (LPSY) is usually unconvincing and is likely on less spread and/or volume.

Point 11 on both Distribution Schematics 2 and 3 give us our last opportunity to cover any remaining longs and our first inviting opportunity to take a short position. Even a better place would be on the rally testing point 11, because it may give us more evidence (diminished spread and volume) and/or a more tightly defined danger point.

Looking now at Schematic 3, Phase C may also reveal itself by a pronounced move upward, breaking through the highs of the TR. This is shown at point 11 as an "Upthrust After Distribution" (UTAD). Like the *terminal shake out* discussed in accumulation, this gives a false impression of the direction of the market and allows further distribution at high prices to new buyers. It also results in weak holders of short positions surrendering their positions to stronger players just before the downmove begins. Should the move to new high ground be on increasing volume and "relative narrowing spread" and then return to the average level of closes of the TR, this would indicate lack of solid demand and confirm that the breakout to the upside did not indicate a TR of accumulation, but rather a formation of distribution.

A third variation not shown here in schematic form would be an upthrust above the highs of the trading range with a quick fall back into the middle of the TR, but where the TR did not fully represent distribution. In this case, the TR would likely be too wide to fully represent distribution and there would be a lack of concentrated selling except in the latter portions of the TR.

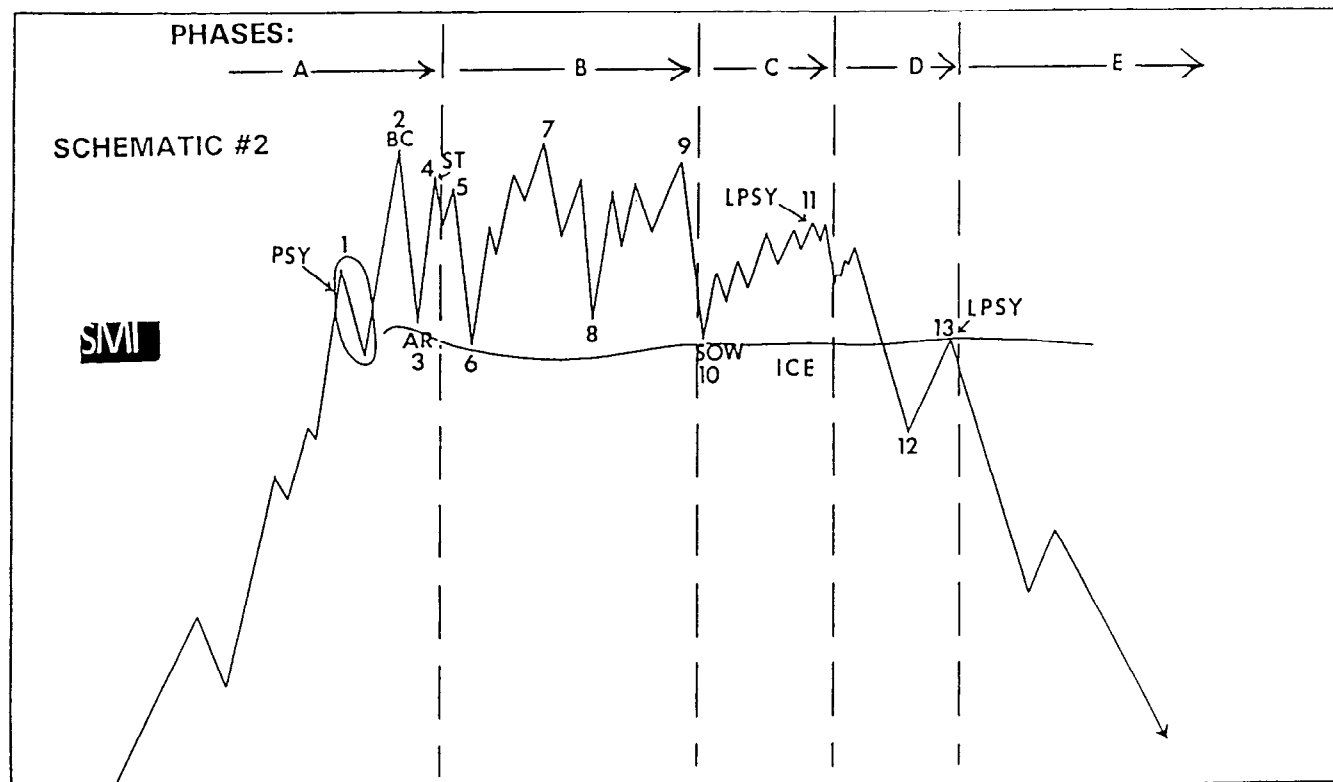
Phase D

Phase D, arrives and reveals itself after the tests in Phase C show us the last gasps or the last hurrah of demand. In Phase D, the evidence of supply becoming dominant increases either with a breakthrough the "ICE" or with a further SOW into the TR after an upthrust.

In Phase D, we are also given more evidence of the probable direction of the market and the opportunity to take our first or additional short positions. Our best opportunities are at points 13, 15, and 17 as represented on our Schematics 2 and 3. These rallies represent "Last points of Supply" (LPSY) before a markdown cycle begins. Our "averaging in" of the set of positions taken within Phases C and D as described above represent a calculated approach to protect capital and maximize profit. It is important that additional short positions be added or pyramided only if our initial positions are in profit.

Phase E

In Phase E, the stock or commodity leaves the



Distribution Schematics

Schematics 2 and 3 show us two model variations of a distribution Trading Range.

Phases A through E...phases through which the Trading Range (TR) passes as conceptualized by the Wyckoff method and explained in the text.

(PSY) Preliminary Supply...is where substantial selling begins to provide pronounced resistance after an upmove. Volume and spread widen and provide a signal that the upmove may be approaching its end.

(BC) Buying Climax...is the point at which widening spread and the force of buying climaxes, and heavy or urgent buying by the public is being filled by larger professional interests at prices near a top.

(AR) Automatic Reaction...with buying pretty much exhausted and heavy supply continuing, an AR follows the BC. The low of this selloff will help define the bottom of the Trading Range (TR).

(ST) Secondary Test(s)...revisit the area of the Buying Climax to test the demand/supply balance at these price levels. If a top is to be confirmed, supply will outweigh demand and volume and spread should be diminished as the market approaches the resistance area of the BC.

(SOW) Sign of Weakness...at point 10 will usually occur on increased spread and volume as compared to the rally to point 9. Supply is showing dominance. Our first "fall on the ICE" holds and we get up try to forge ahead.

The ICE...is an analogy to a wavy line of support drawn loosely under reaction lows of the Trading Range. A break through

the ICE will likely be followed by attempts to get back above it. A failure to get back above firm support may mean a "drowning" for the market.

(LPSY) Last Point of Supply...(Schematic 2/Point 11): after we test the ICE (support) on a SOW, a feeble rally attempt on narrow spread shows us the difficulty the market is having in making a further rise. Volume may be light or heavy, showing weak demand or substantial supply. It is at these LPSY's that the last waves of distribution are being unloaded before markdown is to begin.

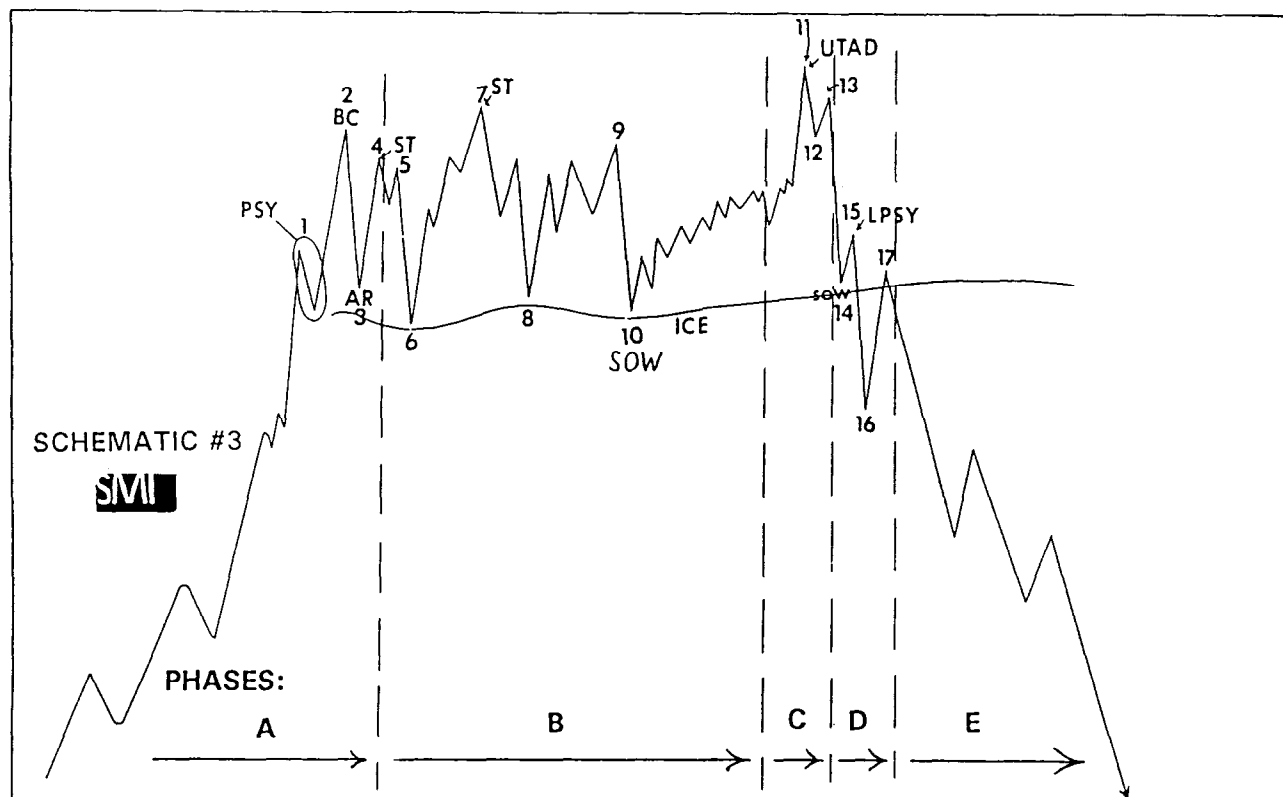
Schematic 2/Point 13: after a break through the ICE, a rally attempt is thwarted at the ICE's surface (now resistance). The rally meets a last wave of supply before markdown ensues.

LPSY's are good places to initiate a short position or to add to already profitable ones.

(UTAD) UPthrust After Distribution...(See Schematic 3/Point 11). Similar to the *Spring and Terminal Shakeout* in the trading range of Accumulation, a UTAD may occur in a TR of distribution. It is a more definitive test of new demand after a breakout above the resistance line of the TR, and usually occurs in the latter stages of the TR.

If this breakout occurs on light volume with no follow through or on heavy volume with a breakdown back into the center of the trading range, then this is more evidence that the TR was Distribution not Accumulation.

This UTAD usually results in weak holders of short positions giving them up to more dominant interests, and also in more distribution to new, less informed buyers before a significant decline ensues.



TR and supply is in control. Rallies are usually feeble. Having taken our positions, our job here is to monitor the stock's progress as it works out its force of distribution.

Successful understanding and analysis of a trading range enables traders to identify special trading opportunities with potentially very favorable reward/risk parameters. When analyzing a TR, we are first seeking to uncover what the *law of supply and demand* is revealing to us. However, when individual movements, rallies or reactions are not revealing with respect to supply and demand, it is important to remember the *law of "effort versus result"*. By comparing rallies and reactions within the trading range to each other in terms of spread, volume, velocity and price, additional clues may be given as to the stock's strength, position and probable course.

It will also be useful to employ the *law of "cause and effect"*. Within the dynamics of a TR, the force of accumulation or distribution gives us the *cause* and the potential opportunity for substantial trading profits. It will also give us the ability, with the use of point and figure charts, to project the extent of the eventual move out of the TR and help us to determine if those trading opportunities favorably meet or exceed our reward/risk parameters.

Real World Examples

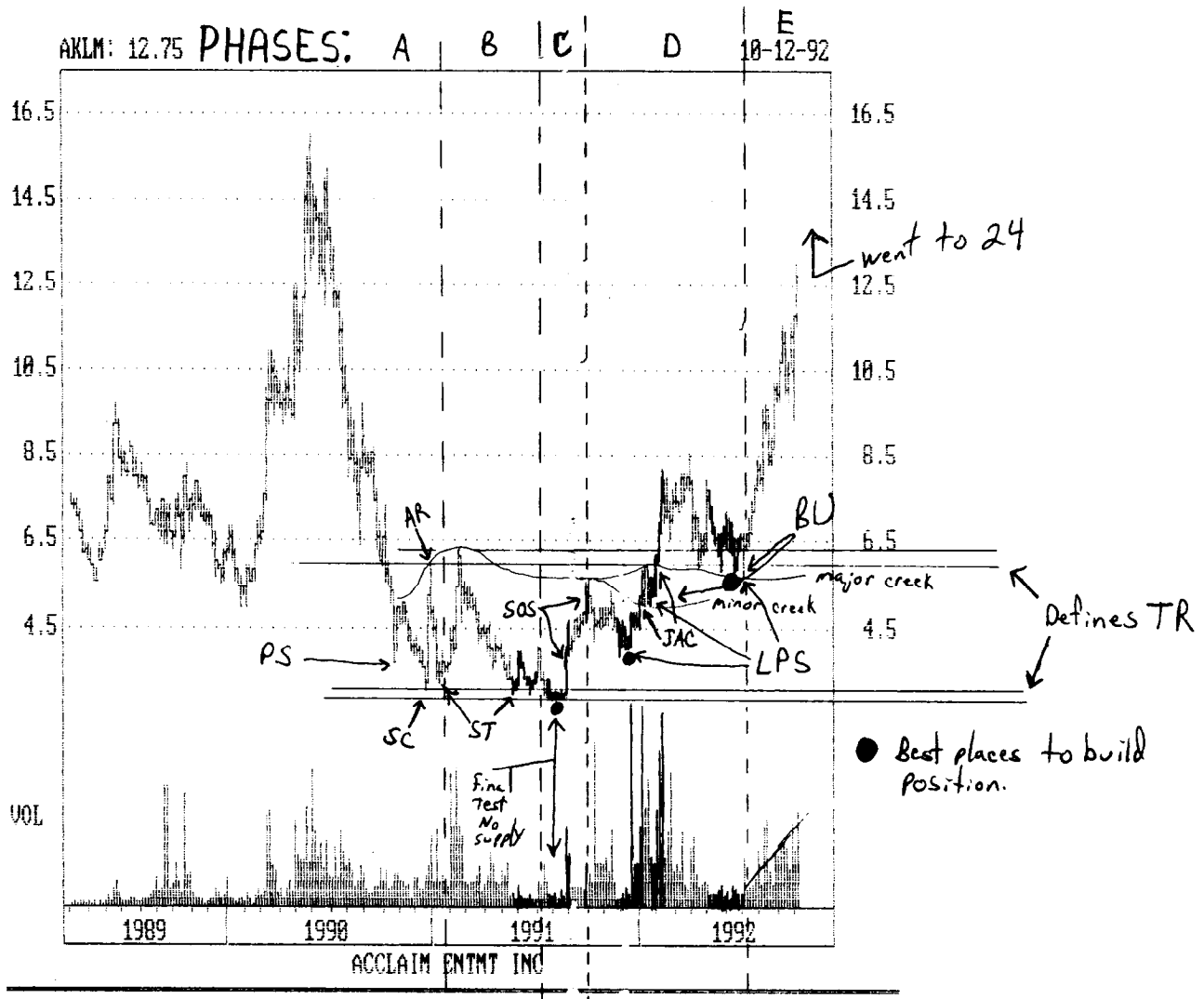
In addition to the model schematics provided here, some empirical examples of real world trading ranges are also presented (*see pages 54-58*), where Accumulation/Reaccumulation preceded a Markup, and Distribution preceded a Markdown. While these empirical examples may not fit the idealized schematics exactly, I have identified and annotated on each of the chart examples, the Wyckoff principles in action and the five Wyckoff phases of a trading range.

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- Pruden, H.O. and Fraser, B., "The Wyckoff Seminars", Golden Gate University, San Francisco, Fall 1992 and Spring 1993.
- Wyckoff/Stock Market Institute, literature, illustrations, and audio tapes. 13601 N. 19th Avenue, Suite 1, Phoenix, Arizona 85029. Tel: 602-942-5581 Fax: 602-942-5165.
- Charts supplied by "Telescan 3.0", Houston, Texas.

Jim Forte has been using Technical Analysis professionally and personally in both stocks and commodities since 1986. He is currently employed in the research services department of a major brokerage firm where he maintains a market update service. He studies and teaches Technical Analysis at Golden Gate University in San Francisco and also offers seminars. He is a professional member of IFTA and the TSAA of San Francisco.

Long Term Accumulation



Phase A: Shows us the PS & SC with the exhaustion of supply as the steep downtrend is ending. The AR & ST set the approximate boundaries of the TR to follow.

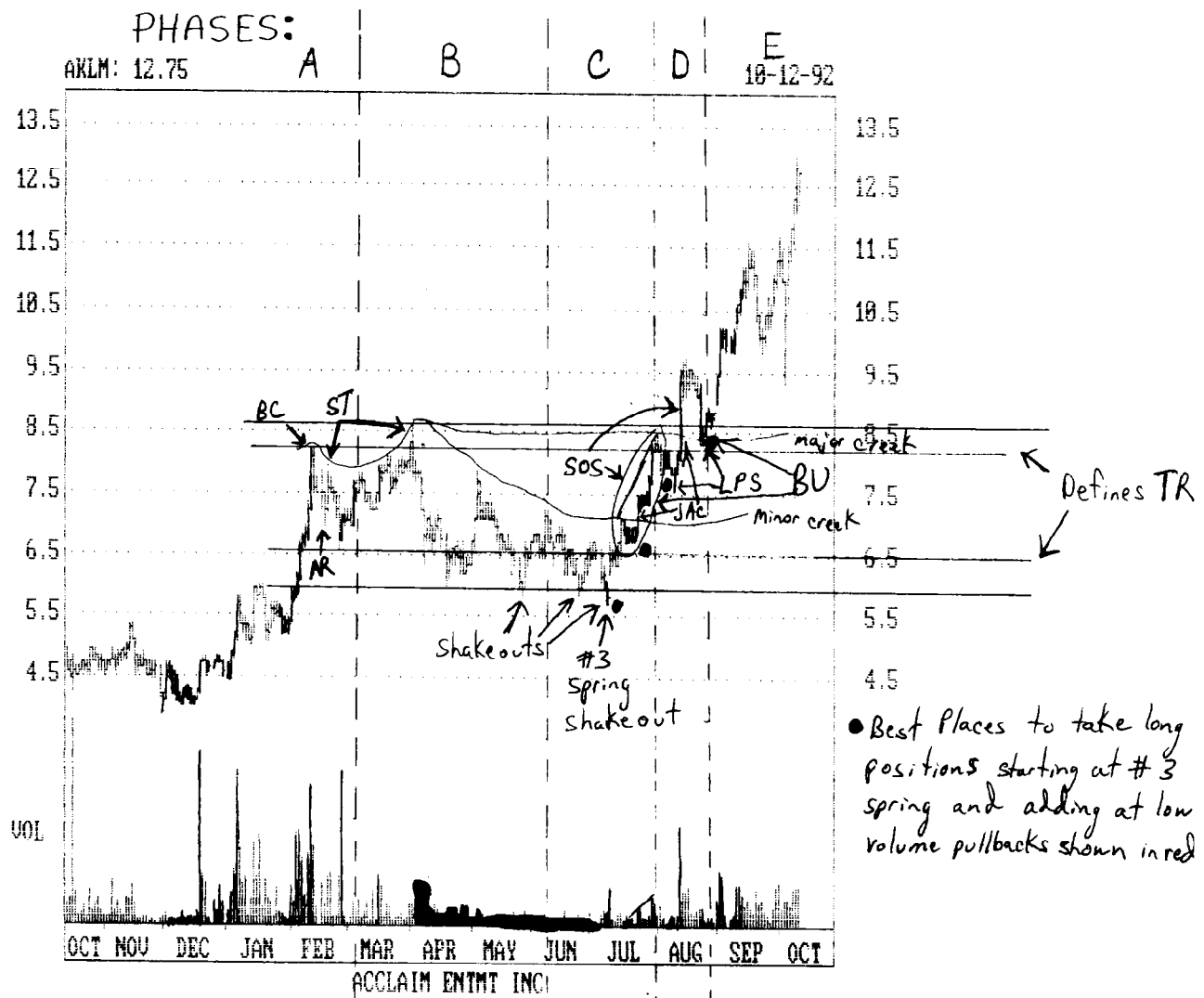
Phase B: In the early stage, we see a wide swing & higher vol, and the first signs of demand asserting its dominance, as professionals are absorbing supply. Late in Phase B, low vol shows supply has dwindled at the TR lows.

Phase C: Gives us a final and unconvincing test & break of the TR lows on extremely light volume. This is followed by a SOS on dramatically increased volume.

Phase D: We see a consistent & pronounced dominance of demand over supply on widening spreads and increased volume to the upside. Reactions are comparatively weak and on light volume.

Phase E: The stock is marking up on rising volume. Demand remains in control.

Intermediate Reaccumulation



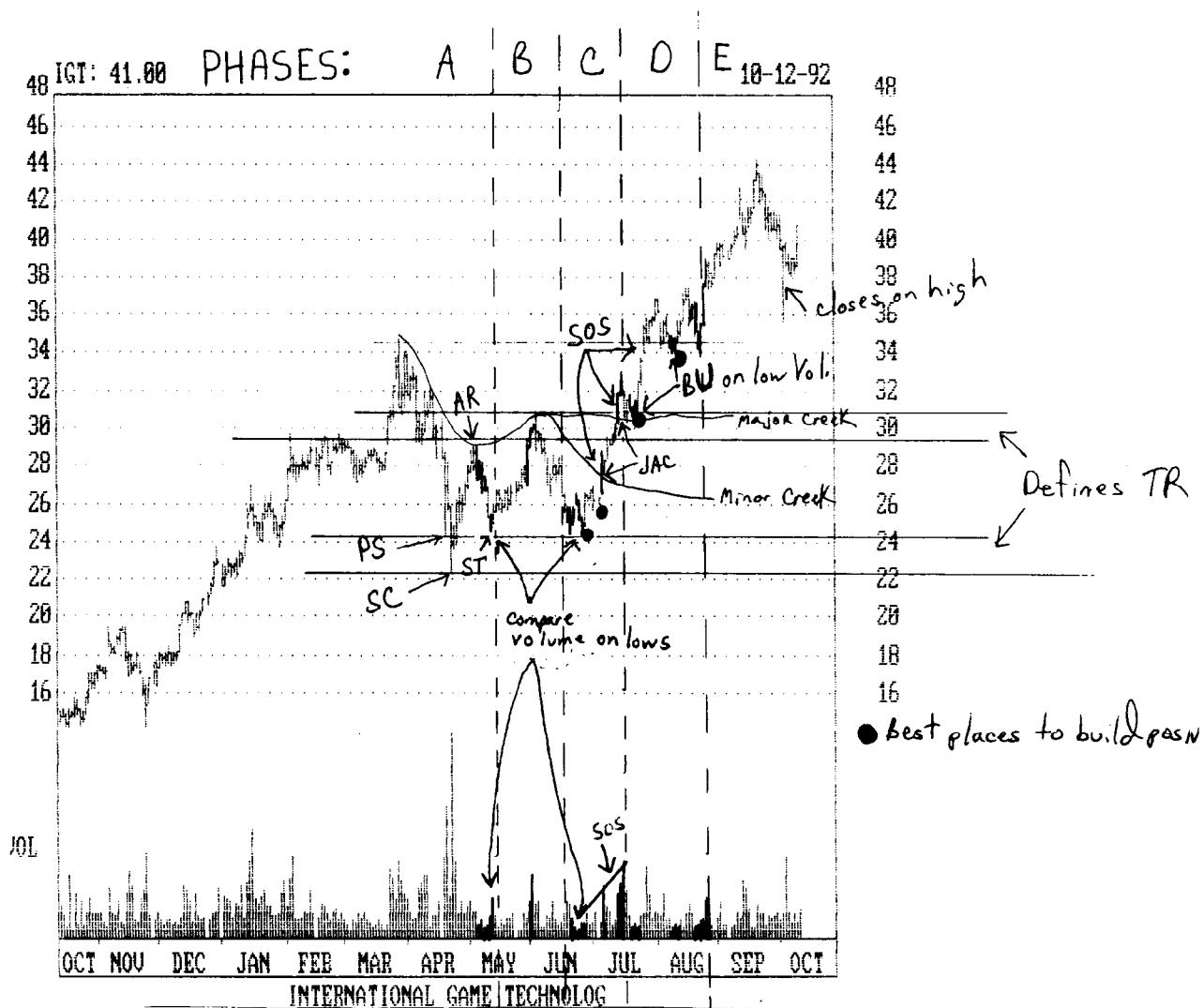
Phase A: Stops Previous Move.

Phase B & C: Shows Comparatively weak volume on consolidation as stock moves down. Volume very light on series of lower lows on Shake-outs. No new supply on #3 Spring. Demand showing dominance as stock comes off spring.

Phase D: Shows continuing pattern of demand in control. Gives us sufficient evidence to add to our longs on pullbacks.

Phase E: Stock Marking Up. Demand in Control.

Intermediate Reaccumulation



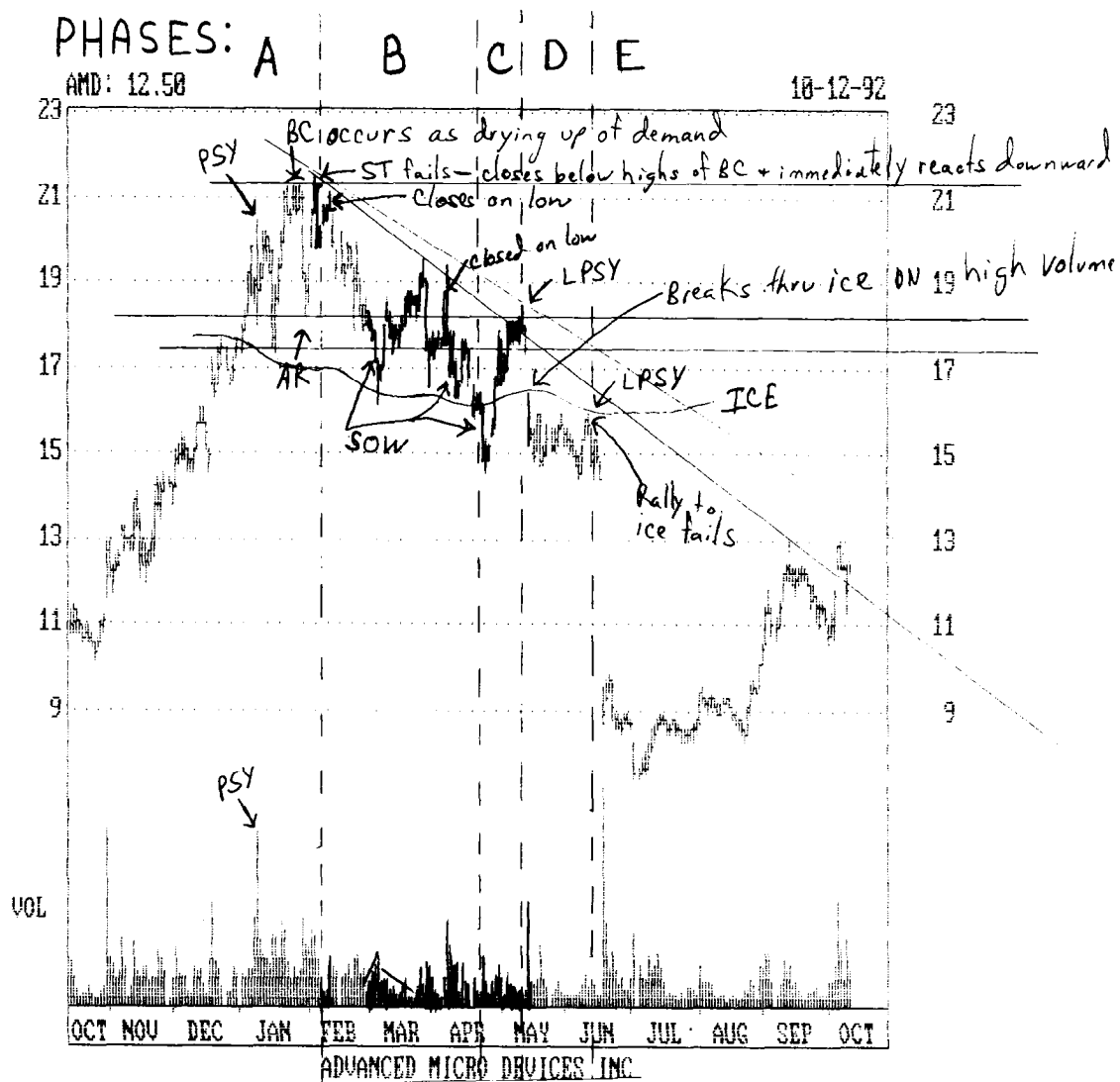
Phase A: Shows Buying Climax stopping previous up move and more pronounced preliminary support and selling climax facilitating accumulation into stronger hands.

Phase B: Inconclusive evidence but does show us evidence of rally on good spread and volume.

Phase C: Shows final low on diminished volume compared to ST and holds support area above climax low. Move off of low shows pattern on expanding spread and volume.

Phases D & E: Continues pattern of Demand in Control.

Distribution



Phase A: Shows us PSY and Push to new highs (BC) on failing volume. ST fails and closes below BC high. The subsequent reaction downward immediately precedes. The next attempt, a few days later, is on poor volume and cannot reach previous highs.

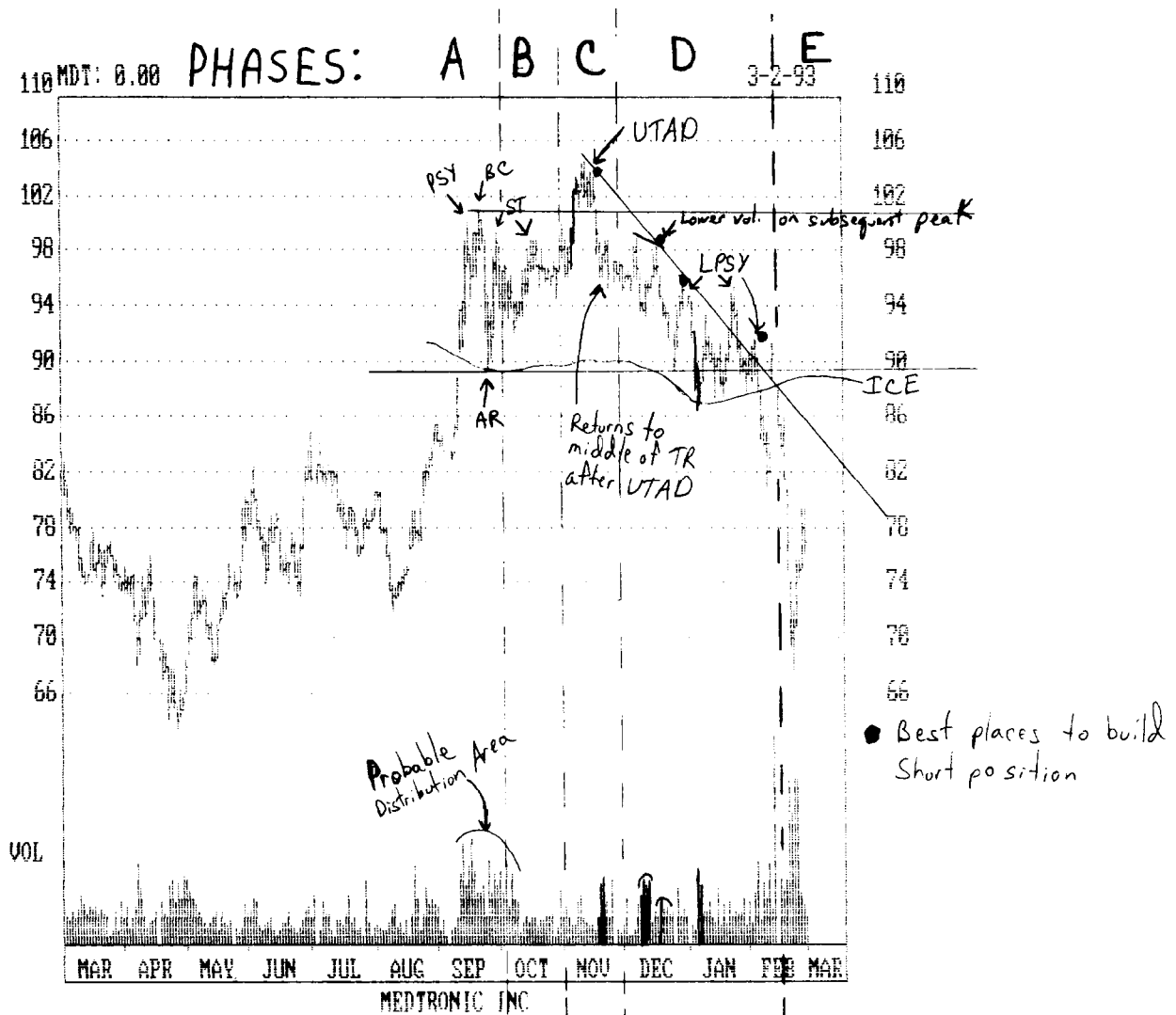
Phase B: Gives us some early clues that supply is in control. Bearish activity is evident showing a SOW on increased volume and the rallies on comparatively low volume indicating a lack of demand. Phase B also shows a break through the TR Support Lines. Subsequent rallies are also on poor volume. Additional Breaks of Support line on even higher volume.

Phase C: We break through the ice and manage to rise above it, however, volume is unconvincing. We can only rise to meet resistance at the supply line and the bottom of our initial trading range. This gives us a LPSY and an opportunity to take a short position with a well delineated risk just about the previous high at 19 1/2.

Phase D: We fall through the ice again, but on significantly higher volume. We have no rallying power and a feeble attempt to reach the ice fails. Supply has continued its dominance. We are given a last opportunity to add to our short position on the rally back to the ice.

Phase E: Markdown accelerates and supply is in control.

Distribution



Phase A: We see the up-move stopped by PSY and the BC. We have an AR and an ST.

Phase B: In phase B relative equilibrium on low volume. No clear indications seem revealed but a #3 spring before the upthrust.

Phase C: As in our #3 Schematic, MTD however shows us a UTAD and then quickly returns to the trading range. The UTAD follows the right side of the TR in phase C.

Phase D: Shows a progression of declines and rallies with higher volume on the down swings. A Supply Line is evident. MDT Breaks through the ice.

Phase E: Our rally back to the ice fails and markdown accelerates.