

## **What is Card Counting?**

Let's start out with what counting is and, more importantly, isn't. Card counting is a means of tracking the relationship between the high-value cards (good for the player) and the low-value cards, which are good for the dealer. When people ask me what I "do" (except at the tables) I tell them I'm a "Statistical Probability Analyst."

Why are the low-value cards good for the dealer? Well, the dealer has to follow rigid rules regarding hitting. She must hit if she has less than 17. The most important card in the deck for the dealer is the lowly-appearing five, as this will make at least 17 out of any stiff hand. Card counting allows us to know when there are more high cards than low left in the deck(s), and we raise our bet accordingly, because we now have an advantage over the house.

How large is this advantage? On certain individual hands this can be as high as three or four percent, but overall we hold about a one percent advantage, depending upon the game and rules. Counting does not give us an automatic winning edge on every hand - far from that. This isn't the movies, and we aren't Rainman. We will win, on average, about 44% of all hands played. When the count is high the dealer has just as good a chance to get good hands as we do. However, the dealer can't split or double, and only gets even money on blackjack - this constitutes our basic edge. Many times in high counts our 20 will lose to the dealer's blackjack (or push her 20) but over the long run we'll win with that ~1% edge.

The long run is defined as beginning after about 400 or 500 hours of play. This will give us some 50,000 hands, a number large enough that it can have some statistical meaning. An analogy: if we flip a coin ten times it would not be too unusual for tails to come up, say seven times. However, if we flip that same coin 500,000 times it's much more likely that tails will come up very close to its expectation of 50% - maybe the number would be .4997. So it is with blackjack - the more hands we play the closer to the statistical curve we get, the closer to our mathematical expectation.

## **Becoming a Counter**

### **STEP ONE: Basic Strategy**

First and foremost we must learn Basic Strategy. In this age of the computer there is very little argument on what constitutes valid Basic Strategy - virtually every book on the market explains this foundation. Basic Strategy (BS) must be so firmly ingrained that we never have to think about it. Every possible decision must be automatic, reflexive. How do we accomplish this? We read and study BS, then we run hands at the kitchen table with the book open for reference until we no longer need the reference material. Then we practice some more. This cannot be stressed enough - unless we have a solid foundation with perfect BS we will never succeed in counting. We practice until BS is firmly embedded in our subconscious. After totally mastering Basic we will then have to be aware of not seeming to be automatic in play. The typical player at the tables hems and

haws over decisions - we should appear to do the same at times. The average person should accomplish learning Basic in about 20 dedicated hours.

## **STEP TWO: Learning to Count**

Now we begin counting. There are many systems available and they fall into two general categories: balanced and unbalanced. Unbalanced counts, like the KO (Knock Out) system were designed to eliminate true count conversion (see Step Three). Generally speaking, the easier a system is to use the less effective it is; sometimes the difference amounts to splitting hairs, but there is a difference. We are going to use High-Low for this example as it is a simple balanced count, and is perhaps the most widely used system. High-Low falls somewhere in the middle of the pack for playing efficiency. We would suggest using this as your counting method at first - switching to a more complicated system should not be hard once High-Low is mastered, and stepping down, as it were, to a simpler count will be very easy.

In High-Low the 2-6 are valued at +1, and the 10s and Aces are counted as -1. Note that there are the same amount in each group: 2,3,4,5,6 and 10,J,Q,K,A. The 7,8,9 are neutral in this count and our eye should be trained to not even see these for counting purposes, for they have no bearing on the count. If the low cards are good for the dealer why are they counted as plus value? Because when we see that low card come out the ratio of high to low cards remaining has changed slightly in our favor.

We start with a deck of cards, flipping them over one at a time and keeping the running count. If they come out 8,K,3,3,6,2,7,A we would count 0,-1, 0, +1, +2, +3, +3, +2. At the end of the deck we should come out at "0". We won't, at least in the beginning. Keep practicing until you do come out even at the end, every time, and gradually build speed. Eventually we will want to approach 25 seconds running the deck down one card at a time while maintaining accuracy. This speed will guarantee that no dealer alive can spread cards faster than we can count.

When proficient at this try pulling a card out of the deck, face down. Set it aside. After running the deck "guess" what the remaining card is. Your validation will come when you say, "It has to be a ten or an ace," and then flipping it over to find yourself correct.

Next we'll flip the cards two at a time. We often see this in "pitch" games, that is, hand-held single and double deck games. On a bust the dealer flips up the player's two hole cards. It's a good idea to learn to disregard "matching pairs" like Q, 5, as they cancel each other out. The less we have to deal with the better, and by not allowing our eye to register these "matched pairs" we will streamline our counting.

In actual play there are many individual styles of counting the cards. In a face-up shoe game some people advocate waiting until the second card is dealt to each hand and counting the hands as whole units, as often a hand will cancel itself out, i.e., 10-6, or two consecutive hands will: K,10 - 3,5. Other folks insist it's easier to count the cards as each one comes out. Try both methods and find what works best for you. In a pitch

game it's a bit different. Count your cards and the dealer's up card first, then all exposed cards from hits, splits, doubles, and busts as they happen. Next count the dealer's hole card and subsequent hits. As the dealer exposes the remaining hole cards one hand at a time a quick glance should suffice to carry the count forward. Practice for the game you intend to play but don't neglect the other - your favored game might not be playable because of crowds, bad rules, etc.

Speaking of rules in general, don't play under bad conditions. If the only game in your area is a six-deck with two+ decks cut off - save up and go to where the games are better. Normally this would automatically mean Las Vegas, but over Super Bowl week-end there I observed a double deck game where a deck-and-a-quarter was cut off - a horrible stunt by the management. At another place that normally had a good single deck game they were dealing three hands in heads-up play, when five and sometimes six is the norm. I overheard some dealer-talk about juicing the games for the Super Bowl crowd. The point is to shop for good penetration and to walk when it's not there. Penetration is a key element in winning. For a good picture of this read Chapter Six of *Blackjack Attack*.

We should be able to master the above two drills in about 20 hours of dedicated practice; as always, your mileage may vary.

### **STEP THREE: Converting to True Count**

This "running" count must be converted to a "true" count to be effective for betting and playing decisions. To do this we divide the running count by the amount of decks left unseen. For instance, in a double deck game after the first hand we have a running count of +4. Since there are virtually two full decks remaining we divide the count by 2, yielding a true of +2.

In multiple-deck games we'll have to keep an eye on the discard tray to accurately estimate how many decks are remaining. So with two decks gone we'd have four left (in a 6D game); dividing the above +4 by four decks gives us a true of +1. One trick here: practice glancing at the discard tray just before the completion of the hand, and see what your divisor is going to be for the next hand. This will give you extra time to compute the true while the dealer is making payoffs and picking up cards.

In single deck with a quarter-deck dealt we have three-fourths left. To divide with fractions we invert and multiply, so we would multiply the running count by the inverse  $4/3$ . That same +4 count would now be multiplied by the 4 (=16), then divided by the 3 (=5.33). One thing about single deck: the true is always more than the running count, both positive and negative, as we always have less than a full deck remaining. While we can get lazy for betting purposes and use the running count as the true count here in single deck, when it comes to Basic Strategy deviations (playing decisions) we need to have an accurate true count. This is fully covered in the recommended reading.

Now we start dealing hands. Deal one hand to yourself, one for the dealer. Go as slow as you need to keep the count accurately. Keep score with poker chips or the like. Although you will never see this in casino play, deal down to the last six or eight cards. After the last hand run the remaining cards out to check your count. When you can deal, play all hands correctly, count, convert to true count, pay off hands, and check the remaining deck for the count (and are correct on the count) in under two minutes with this single deck you are well on the way. Once speed has been gained consider switching from the kitchen table to a good software package, like Casino Verite by Norm Wattenberg. Programs like this will automatically track your play from session to session, providing valuable input on your progress. This will perhaps be the longest stretch in building our game, taking maybe 60 more hours of practice.

#### **STEP FOUR: Overcoming Casino Distractions**

Our next step is to start dealing two, then three hands, playing all of them as above and keeping an accurate count. Take your time and build to this point. Now we've arrived! Well, no... we haven't. Casinos offer much in the way of distraction, so we must account for that, too. Cocktail waitresses will be interrupting every 2.875 minutes, dealers get chatty, players get obnoxious, slot bells are ringing, the craps table goes berserk, etc.

Begin with a radio playing nearby and continue dealing out multiple hands, playing and paying, until you are exactly on the count every time. Then add a television along with the radio. If you happen to have a couple of small children nearby this is even better. Each individual will differ in the ability to overcome these distractions, but 20 hours of practice should do it. When none of the above disrupts your counting ability and accuracy we're ready for the next step: talking.

You will invariably need to talk and interact with other people at the table in the casino. You don't want to appear to be an individual locked deeply in concentration with furrowed brow, staring at the cards. So, with the radio and TV going have a friend or (hopefully supportive) spouse deal to you. Carry on normal small talk. Look around. Be loose at the table. You'll get this in real life, so practice it: "So, where you from?" and "Are you in town on business?" and so on. You will need to be able to think and respond while keeping the count without looking like you're doing so.

People develop very individualistic methods for "holding" the count while carrying on an in-depth conversation - others are fortunate enough to be able to put the count in an area of the brain where they can retrieve it instantly. Some folks place x number of fingertips on their thigh under the table, some employ knuckle joints on top of the table, some use chips to indicate the count. However you accomplish it, you must remember the count! Perhaps another 20 hours will gain this goal with the friend dealing multiple hands to you in the above scenario. In building our game we cannot practice too much; the results will be readily apparent at the tables if we don't.

#### **STEP FIVE: The Act**

Now we're set! Well, close anyway. Now we need an act. Why? Well, we want to use everything we can to distract the house from seeing our bets going up and down with the count. We want to look like the "gamblers" at our table. Study them, emulate their language, their superstitions, their body language. Develop your act and make it real. Assume your persona when leaving your room, not at the table. You're a nut-and-bolt salesman from Topeka in town on business and wanting to get a little action at the tables; you happen to be a tourist from LA there to blow off some steam, take in a few shows. The point is you don't want to be caught flat-footed when someone asks you a question: "I, uh, well, duh...I'm here, ah, I'm here... on... business - Yeah! That's it!" The importance of our cover act is directly proportional to the size of our wagering unit: the higher the unit the more cover needed.

Never reveal that you know anything about blackjack other than something like, "I used to do pretty good at the VFW Casino Night. Of course, my friend Bob was dealing..." (if something like this fits your act).

Dress to fit your act. Would a tourist be in a three-piece suit? An attorney at a convention might, but not a guy from Encino who dragged the wife and kids out for a few days of gambling and sight-seeing.

You'll know you're on course when you can do everything we've talked about so far while speaking to a pit boss about good restaurants.

## **STEP SIX: Bet Spreads**

Watch your bet range, or spread. While everything mathematical tells us to jump our bet from, oh, \$5 to \$100 this is the surest way to get unwanted attention in the least and outright barring at the extreme. To survive we must unfortunately limit our spreads; the pits are not stupid - they basically know how counting works.

In pitch games this usually means spreading about 1-5 units; in shoe games we will get away with much larger spreads, say 1-8 or even two hands at 6 each. Generally counters step their bets up with the count: 1 unit at negative or 0, then incrementally up with the count. Read books like Stanford Wong's Professional Blackjack and Don Schlesinger's Blackjack Attack for more input in this area. In fact read everything you can find from these two authors as well as Snyder, Uston, and other accepted experts. Read, then read some more.

At this point it would be prudent to take it slow, and play at the lowest tables you can find. Fine-tune your game and act. There are still one-dollar tables in Nevada. Read the suggested authors - bankroll is very important. Even spreading 1 to 5 in silver a counter needs a bankroll in the hundreds. Never play under-financed - it's self-defeating. Wild swings happen all the time in this game, and we don't win consistently - the proficient counter wins in the long run.

## **SUMMARY**

Following the above practice recommendations we have something in the neighborhood of 140 learning hours called for; your mileage may vary dramatically from this number. If that's spread out - an hour an evening, several hours each on weekend days - we should be ready for the tables in a few months. Do yourself a favor - don't rush the process and play before you're ready. You could get lucky, but that blackjack devil might just decide to bite you in the butt, and believe me his teeth are sharp. A note: once learned, counting stays with you. At most you'll need brush-up practice if it's been a while.

Most people do not have the time, desire, or energy to do what it takes to become an expert card counter. Card counting is not rocket science, but it does take work. A lot of work. If you follow through you will be part of a very small fraternity/sorority, more knowledgeable than perhaps 98% of the people sitting on either side of those tables. Is it worth all the effort? In a word, yes.